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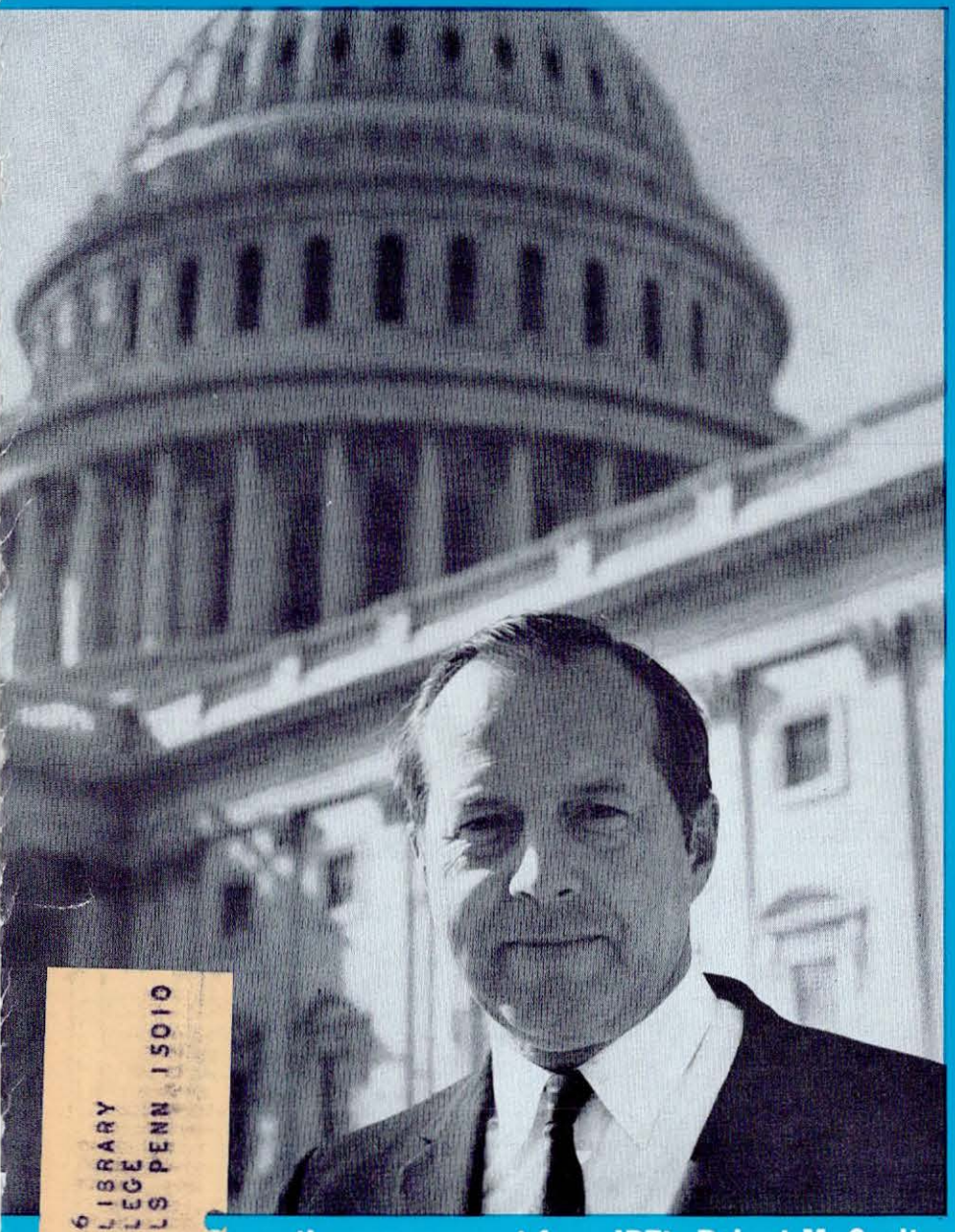
UP's "COIN" SYSTEM HIKES CAR UTILIZATION

November 3, 1969

RAILWAY AGE

THE TRANSPORTATION WEEKLY



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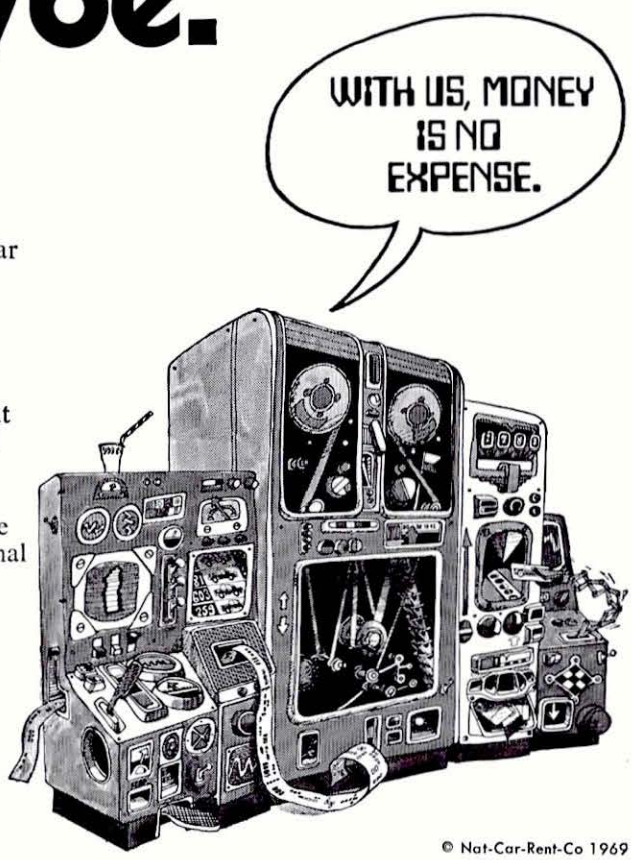

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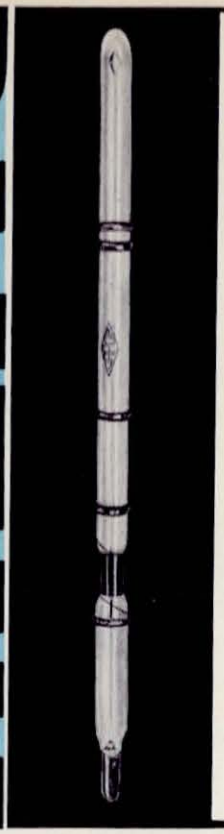

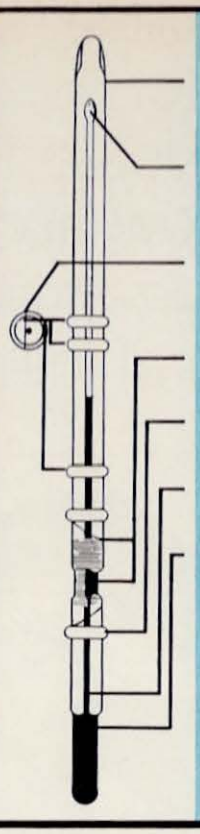
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Circle 2 on coupon page 28

RAILWAY AGE

November 3, 1969 • Vol. 167, No. 17

THIS WEEK

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Hopes rise (again) for a strong transit bill p.14

CP spends $20 million on unit trains p.17

Chicago plans new rail-to-rail links p.22

How UP keeps track of its trains p.24

Rohr tools up for BART job p.26

Viewpoint—What is the "railroad problem"? p.38

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. . . AND COMING NEXT WEEK

ENGINEERING ISSUE: Faced with the problem of how to move a mountain as much as ten miles, S. J. Groves decided to build its own railroad. You'll learn why this prominent roadbuilder bought two heavy locomotives and 24 cars to ship 1,500,000 yards of dirt by rail, in the Nov. 10 Railway Age.

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10 new ways to fly from Cleveland

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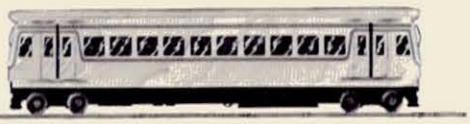
2. 

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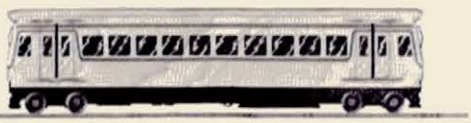
7. 

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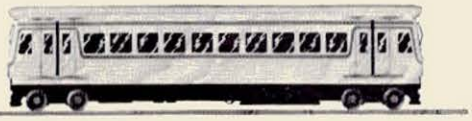
10. 

Cleveland's flyers have gotten a high-speed start for the past several months. Nickel stainless steel cars speed them from downtown to the airport in 22 minutes.

Now the Cleveland Transit System is buying ten more of these lightweight, corrosion-resistant cars from Pullman Standard.

These strong, safe cars will make it even easier and faster to get in and out of Cleveland. If your hometown's ready to fly the Cleveland way, write for our brochure, "Nickel Stainless Steel—The Modern Material for Modern Transit." The International Nickel Company, Inc., 67 Wall Street, New York, N.Y. 10005. In Canada, The International Nickel Company of Canada, Limited, P.O. Box 44, Toronto-Dominion Centre, Toronto 111, Ont.

INTERNATIONAL NICKEL

Circle 3 on coupon page 28

SHORT AND SIGNIFICANT

Budd consortium signs APT package deal

The plans, patents and research behind Britain's Advanced Passenger Train (APT)—a turbine-powered unit set for 1971 testing at 150 mph on existing, unimproved track—now are available to the U.S. and Canada. The APT is part of a technology package signed over by British Railways last week to a consortium headed by the Budd Co. and including Bethlehem Steel Corp. and Hawker-Siddeley Canada Ltd. Financial details of the licensing agreement were not disclosed. The package covers, in addition to the APT, operations and systems analysis, power control, electrical research and train controls, engineering developments in right-of-way, materials analysis and development, and chemical research. APT technology is designed for application to freight as well as passenger trains.

D. C. Metro ready for Dec. 9 start

With official groundbreaking set for Dec. 9, D. C. Metro planners will shortly be awarding initial construction contracts totaling $60 million. Last week, the Washington Metropolitan Area Transit Authority awarded its first quality-control contract. Worth around $500,000, it went to Tippetts-Abbett-McCarthy-Stratton, an architectural and engineering firm. It covers technical inspection services for nearly half a mile of twin-tube tunnel running from Connecticut Avenue and K Street, N. W., under Farragut Square, Lafayette Park and the North front of the Treasury building to G Street, between 14th and 15th. Bids on construction of this part of the system, estimated to cost between $8 million and $12 million (depending on which of three alternate methods of steel and concrete construction is chosen), are to be opened about Dec. 2.

WABCO to buy brake business Canadian air

The Westinghouse Air Brake Co. and Canadian Westinghouse Co., Ltd., have reached an agreement in principle whereby WABCO will purchase Canadian Westinghouse's air brake business for about $5 million. Machinery, equipment, tooling and inventory are included in the purchase. WABCO will continue the air brake business in its present location as a tenant of Canadian Westinghouse the announcement said.

One merger is dropped, another moves ahead

Illinois Central Industries and MSL Industries have abandoned their merger agreement-in-principle. But ICI is now making another move—to acquire Pepsi-Cola General Bottlers, Chicago-based distributor of Pepsi and other soft drinks. Under the ICI-Pepsi proposal, the soft-drink distributor would be acquired by ICI in an exchange of stock valued at about $44 million.

AMSTED hikes prices for rail castings

Amsted Industries announced price increases last week ranging from 3% to 10% for certain steel castings it produces for railroads. "The wide range of designs and chemistries for side frames, bolsters, couplers and yokes—the principal castings used in railroad freight cars—results in selective price increases," said the announcement.

PATH expanding traction power system

The Port Authority Trans-Hudson traction power system will undergo a $6.6 million expansion to provide improved rail service between Jersey City and Newark. The project, which will provide additional power required for the operation of longer trains, includes the construction of two new electrical substations and two new switching stations. The first two power project contracts in the new program have been awarded. A $478,290 contract for dc electrical equipment was awarded to ITE Imperial Corp. of Philadelphia, Pa. A $208,566 contract for ac equipment was awarded to General Electric, also of Philadelphia.

MONDAY MORNING REPORT

A NEW TAX PACKAGE FOR RAILROADS

Late last week railroad men were giving close—and in most cases pleased—scrutiny to a brand new tax-relief package voted by the Senate Commerce Committee as part of its version of the over-all tax reform bill. The Treasury Department presented its new proposals to the Committee on Oct. 29, with the comment that the railroad industry supported them. While railroads didn't get everything they wanted, most observers agreed that they had come out of the new round very well, indeed.

WHAT HAS GONE BEFORE . . .

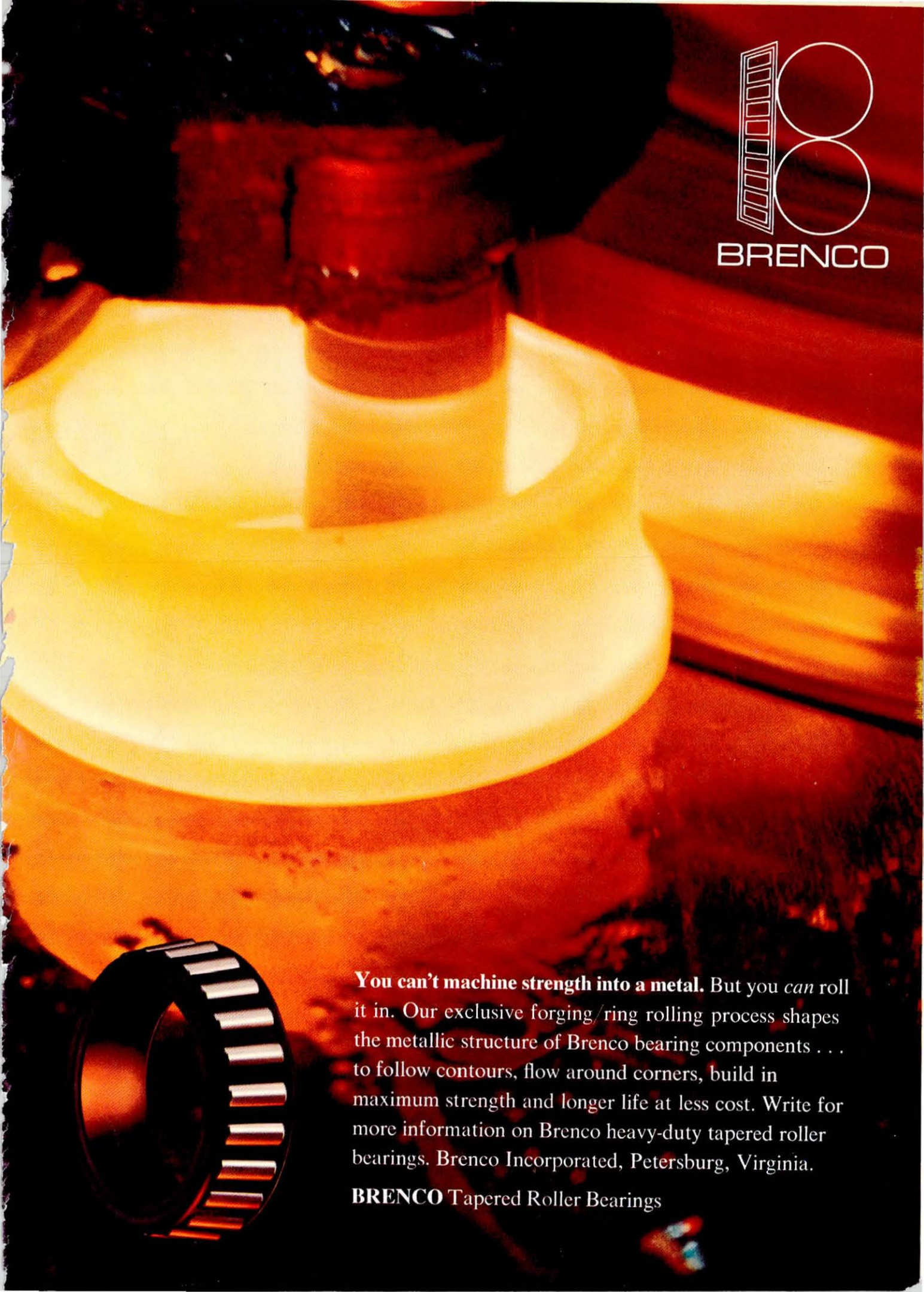
The situation prior to last Wednesday was this: President Nixon last spring asked Congress to repeal the 7% tax credit—a severe blow to railroads, which had used this incentive to beef up their equipment outlays. Railroads began to make a case for exemption, but against staggering odds. In August the House passed a tax reform bill killing the tax credit but giving railroads a seven-year tax write-off on some, though not all, new freight cars. Then the Senate Finance Committee, after much work on the part of railroads and their suppliers, voted repeal of the credit but agreed to let railroads continue to use it on a gradual phase-out basis, ending in 1974. Subsequently, however, the Senate Committee reconsidered, and further narrowed the advantages by eliminating locomotives, flat cars and auto racks.

. . . AND WHAT HAPPENED LAST WEDNESDAY

The Treasury Department last week presented its new proposals; the Senate Committee accepted them. The Committee voted repeal of the credit with no exemptions. But it offered railroads a five-year tax write-off on all new rolling stock—including locomotives and leased equipment (but not including equipment purchased by private car lines). And there was something else which for many railroaders was the best (and most surprising) news of all. The committee decided that grading and tunneling costs could be amortized on the basis of a 50-year life span. Railroads have fought long, and in the past unsuccessfully, for this right.

FOR SOME ROLLING STOCK, A FOUR-YEAR WRITE-OFF

To assist railroads which ordered equipment in the belief that the tax credit would be retained, the committee voted a four-year write-off for rolling stock purchased in 1969 but undepreciated as of Jan. 1, 1970. Meanwhile, rolling stock ordered before the effective date of repeal would qualify both for the tax credit and a fast write-off. The committee also voted to permit the cost of repairs to rolling stock to be deducted in the year made.



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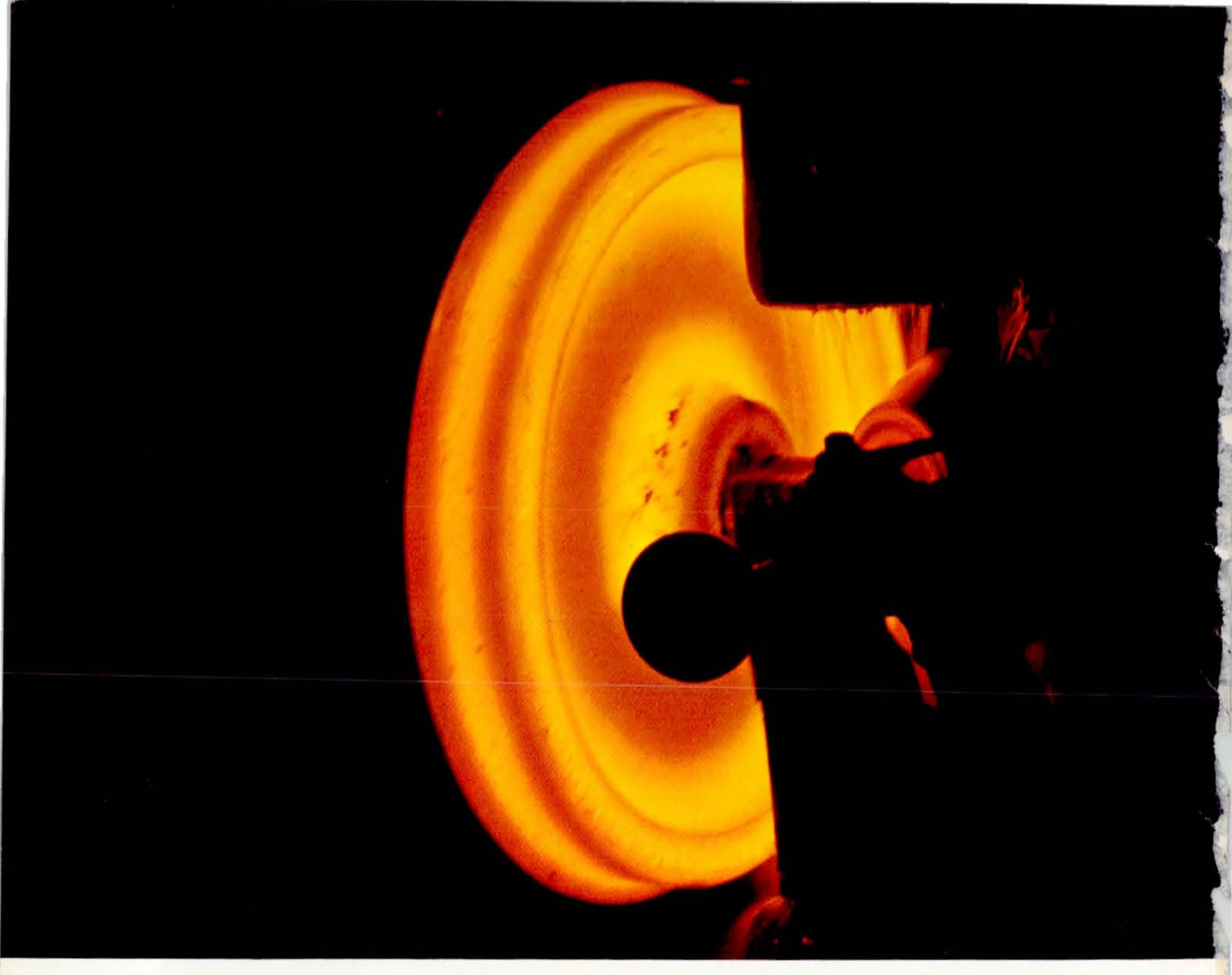

CAFL wheels and axles for the railroads

The Compagnie des Ateliers et Forges de la Loire, better known as CAFL, is one of the major European specialty steel producers, combining a fine tradition of steel making with the most modern equipment—The Dunes plant of CAFL, located near Dunkirk and Antwerp, specializes in the production of Railway wheels and axles, sold separately or as mounted sets.

The modern facilities of the Dunes have given to CAFL a leading position in the manufacture of wheels and axles. CAFL is the main supplier of the French Railroads, also exports to all European countries and the rest of the world, furnishing mounted sets to the railways of India, Turkey and Egypt; wheels or axles for Argentina, Brazil and Mexico . . .

Forged wheels: • Size limitations: all forged and rolled wheels with a diameter ranging from 20″ to 53″, and a weight from 375 to 2200 lbs.

• Steel specifications: all railroads' requirements can be met; in particular, all specifications such as A.A.R., A.S.T.M., U.I.C . . .

Axles: The forging and finishing installations for axles are particularly impressive—axles are finished rough turned or completely finished, either individually or as part of mounted sets.

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RAILWAY AGE
THE TRANSPORTATION WEEKLY

November 3, 1969

WEEK AT A GLANCE

New deadline for ACI labeling is June 1, 1970

Railroads and private car lines have an extra five months to equip interchange freight and passenger cars with automatic car identification labels. Extension of the deadline from Jan. 1 to June 1, 1970, was announced last week by W. H. Chidley, executive vice chairman of the AAR's Mechanical Division. The extension was made, said Chidley, "on behalf of the many railroads and private car companies who experienced a slow start due initially to difficulty in acquiring the necessary materials, thereby losing valuable time; also the fact that the coming cold and inclement weather will reduce, substantially, the rate of applications of labels to cars and trailers." Section (a) (13) of Interchange Rule 3 and TOFC Rule 1 have been changed to reflect the extended deadline for labeling. About 65% of the interchange fleet is now equipped with ACI labels.

Sept. car orders rise; nine-month total is 64,516

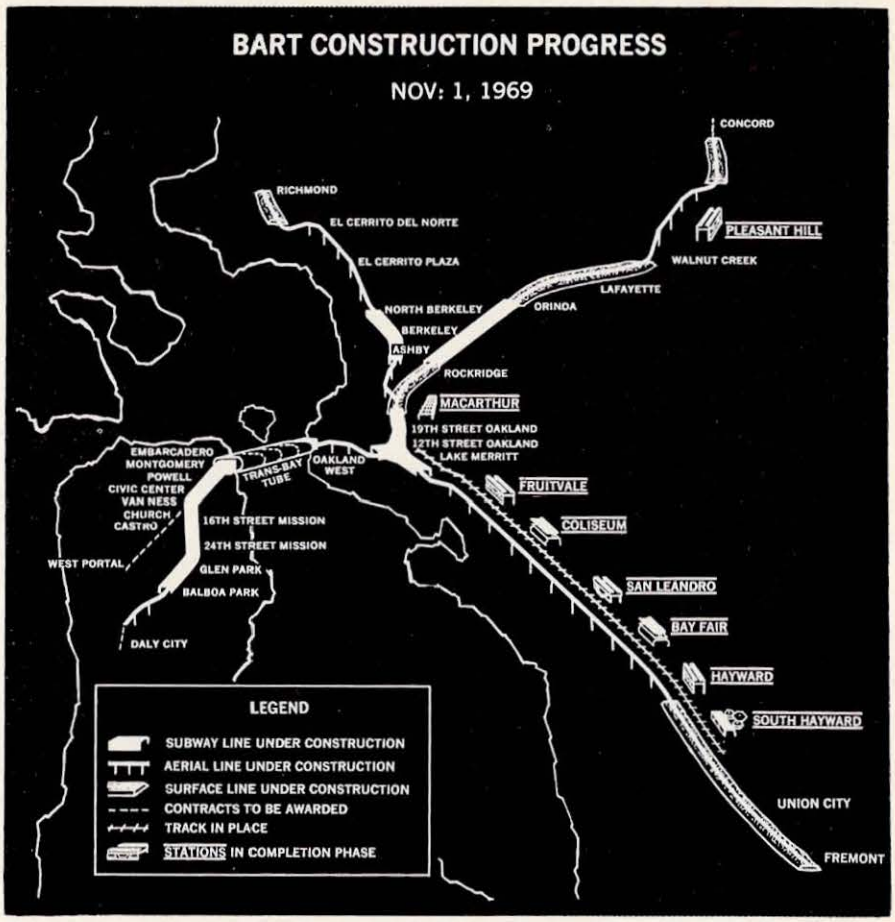
Orders for new freight cars recovered sharply in September, following an August slump. The American Railway Car Institute reported last week that new-car orders totaled 4,504 in September, compared with 2,679 in August and 4,323 in September 1968. In addition, 611 rebuilds were ordered in September. No rebuilds were ordered either in August of this year or in September of last year. For this year's first nine months, new-car orders came to 64,516. The undelivered backlog on Oct. 1 was 45,133.

Bay Area system is 55% complete

Construction of the Bay Area Rapid Transit District's 75-mile network is now more than 55% complete, BART General Manager B. R. Stokes reported last week. He said rails have been laid along the entire 20-mile segment of the system between Hayward and downtown Oakland. Architectural finish work on seven passenger stations along the initial segment is nearing completion, and installation of electrical power rail has been started.

Street restoration above the completed subway station structures in downtown Oakland is to be finished before the Christmas holidays, according to Stokes.

Prototype train tests will begin on the Southern Alameda County transit line next August, with revenue passenger service to follow one year later. Full operation of the $1.3-billion system, including the trans-bay and San Francisco subway lines, is scheduled for mid-1972.



GUS WELTY

LINES ON LABOR

THE UNKINDEST CUT OF ALL, sometimes, is just to be ignored. In its October issue, *Fortune* views (with alarm) the 1969-70 management/labor scene. The emphasis is on "five great industries" in which critical bargaining will be taking place—electrical manufacturing, trucking, meat packing, rubber and automobiles. Somehow, there is no mention of the industry which (1) does 40% of the nation's freight-transportation business, (2) still employs close to 600,000 people, and (3) faces one tough session after another in handling new demands from virtually every one of its many employee organizations.

THERE'S NO POINT to writing letters-to-the-editor—letters saying "Hey, look. We're in trouble, too." But railroads are no less "great" than the five industries which concerned *Fortune*. A case could be made, that inflationary settlements in the railroad industry will have even greater nationwide impact than similar inflationary settlements in those other industries.

MAKE NO MISTAKE: Railroads are in trouble. Rail unions are back at their old tactic—each trying to out-demand the one that went before. First, it was the shopcrafts. Then came the Clerks and the M/W organization, demanding 12% per year over three years. Then came the United Transportation Union, demanding 15% per year over two years. Then came the Signalmen, demanding a package deal that would give skilled employees raises amounting to 54% on the union's abacus (and to a much higher figure by management reckoning.) Yet to be heard from is the Brotherhood of Locomotive Engineers—and in view of everything that's gone before, can the BLE afford to demand less? Probably not.

IS THE PUBLIC INTERESTED in all this? That's hard to say. Railroads have talked quite proudly of their ability to hold the line, to keep transportation charges down, to help fight inflation. Maybe the average citizen (if he cared at all) figured railroads could keep on doing that forever. Maybe now the average citizen should be told that "forever" just ran out.

RAILROADS' REPEATED TRIPS to the ICC for rate increases should be recognized for what they are—an admission that the industry is running out of ways to offset steadily rising labor (and material) costs. The public, that average citizen, ought to be worried about this. And so, come to think of it, should rail labor—because unions don't really win much, in the long run, by making management a loser.

Turbine-electric contract goes to GE and GSI

The gas turbine is due for more evaluation as a prime mover for New York City's suburban rail network. The Metropolitan Transportation Authority has commissioned General Electric and St. Louis Car Division of General Steel Industries to design a passenger carrying gas-turbine/electric car suitable for use on the Erie Lackawanna's New Jersey and New York State suburban routes. The cost of the $200,000 study will be shared by the Metropolitan Transportation Authority and the States of New Jersey and New York.

More immediate in MTA's program for comparing the costs of operating self-propelled cars as opposed to full electrification of lightly traveled routes is the testing which is about to start on the first gas-turbine/electric rail car. Budd and the Garrett Corp. have cooperated in this program which earlier involved the same car when it was powered solely by gas turbine prime movers through mechanical transmissions.

● **Crux of problem.** Because internal combustion engines are not permitted in New York City's rail passenger terminals, the goal is a car which can operate from third rail in stations and tunnels and on its own over routes without electrification. To achieve this the Budd/Garrett car now has an electrical transmission. It will run as a turbine/electric outside the third-rail zone and as a normal m-u car approaching city terminals.

The GT-2 test vehicle which soon is to begin operation on the Long Island will determine the technical feasibility of the gas-turbine/electric generating system.

The car is not designed for passenger service and thus will not enable MTA to make a determination of the operating and maintenance expense of revenue service with cars of this type.

● **Final appraisal.** MTA reports that its experience with GT-2, plus analysis of the GE/St. Louis design, will furnish the dollars and cents information necessary to determine the potential of such a concept. If the tests and studies prove successful, interested suppliers will then be asked to furnish bids on the gas-turbine/electric car designed under the GT-3 (GE/St. Louis) contract. Such a car could take into account all the experience accumulated with gas-turbine passenger cars.

Earnings: A few bright spots after nine months

If you picked your spots carefully, it was possible last week to find a little sunshine in railroad nine-months earnings statement. Unfortunately for the over-all well-being of the industry, however, the total picture was one of stormy weather.

On the up-side at the three-quarter mark in 1969 were such roads as Santa Fe, Great Northern, Louisville & Nashville, Norfolk & Western, Illinois Central, Gulf, Mobile & Ohio, Missouri Pacific, Seaboard Coast Line. Net-income decreases came to a number of other roads, though—and the situation only seemed to get worse and worse for those companies in the deficit category. Despite third-quarter improvement, for example, Milwaukee posted a $6.6-million loss for the first nine months this year. At this same time last year, it was working on a modest profit-figure. Chicago & Eastern Illinois managed to cut its deficit from year-earlier figures. But for such roads as Rock Island, Reading, Chicago South Shore & South Bend, the red ink just got redder. And although the Penn Central Company reported consolidated earnings for the first nine months of $17.6 million, compared with $52.2 million in the comparable 1968 period, PC's parent railroad company reported a net loss of $40.2 million for the Jan. 1-Sept. 30 period, compared with a loss of $747,000 in the corresponding period last year.

● **Light and dark.** A sampling of nine-months reports shows this combination of light and dark:

—Santa Fe Industries increased its January-September net income to $47.6 million, up from $29 million in 1968. Transportation operating revenues were up sharply, from $517.5 million to $552.9 million.

—Seaboard Coast Line earnings for the first nine months rose by 100%—to $30.2 million from $15.1 million in 1968. This was accomplished on operating revenues of $363.1 million, an increase of $36.7 million from the same period last year. SCL President W. Thomas Rice attributes the improved earnings in part to further realization of benefits flowing from the July 1967 merger of the former Atlantic Coast Line and Seaboard Air Line—and in part to a sustained high level of business activity in the road's territory.

—A strong third quarter boosted Great Northern earnings to $18.5 million for nine months of 1969, up from $12.1 million last year. Third-quarter freight revenues were up 13.3% from a year ago, and in September GN revenues were the second highest on record.

—L&N reported an 11% increase in operating revenues for the year to date. Operating expenses were also up sharply, but the road still managed an increase in net (aided by certain extraordinary income items) from $16.2 million last year to $25.5 million in 1969.

—N&W earnings declined during the third quarter, but nine-month figures still showed a gain, from $53.7 million in 1968 to $62.9 million this year.

—Southern Pacific's nine-months net income this year, at $84.94 million, was just a shade below last year's showing of $85.97 million.

—Gulf, Mobile & Ohio came in with nine-months earnings totaling $6.9 million, up from $5.5 million last year.

—Missouri Pacific's consolidated earnings edged up to $14.2 million for the first three quarters of this year, compared with $13.8 million last year.

—Illinois Central Industries had nine-month ordinary income amounting to $24.8 million, up from $17.5 million in 1968.

● **Decreases common.** On the downside, this was the picture:

—Soo Line posted a strong third quarter, but nine-month net income dropped from $4.3 million in 1968 to $3.6 million this year.

—Northern Pacific slipped from $16.9 million to $13.9 million.

—Western Pacific dropped sharply, from earnings totaling $4.3 million in the first three quarters of 1968 to $968,000 for the comparable period this year.

—The Milwaukee Road, bolstered by a good third-quarter performance, reduced its deficit. Still, a year ago, Milwaukee reported nine-months earnings of $870,000, and the nine-month loss this year stood at $6.6 million.

—Chicago South Shore & South Bend suffered a record loss for nine months, $355,000. Last year, CSS&SB's deficit for the comparable period was a more manageable $1,152.

—Chicago & Eastern Illinois, still in a deficit position, nevertheless showed some improvement by cutting its nine-month loss from $1.2 million in 1968 to $700,000 this year. Revenues and expenses were both down.

—Reading's nine-month loss this year was $3.4 million. Last year the figure was $2.7 million.

—Consolidated net for Chesapeake & Ohio/Baltimore & Ohio was off for the first nine months—from $36.2 million in 1968 to $30.1 million in 1969.

To a greater-than-usual extent, results seemed to be affected by unusual items— including payments involved in settlement of the North-South divisions case; and weather-related expenses. For example, Norfolk & Western spent about $1.2 million to restore service on lines damaged by floods in the Midwest in July, and in Virginia in August. Traffic on N&W and other affected roads was also adversely affected.

As for fourth-quarter results, the prevailing attitude now is one of optimism.

Commented N&W President Herman H. Pevler: "We expect our fourth quarter to be somewhat better than last year but it is vital that the Interstate Commerce Commission approve the general freight rate increase."

IRT's Robert M. Coultas reports:

Hopes rise (again) for a strong transit bill

Hopes for massive, long-term Federal aid to transit soared this year with reports that the Nixon Administration would support a transit trust fund. These hopes were severely jolted when the President rejected the trust fund concept and proposed, instead, a 12-year, $10-billion program that The New York Times characterized as representing "no more than hopes and promises." High Administration officials (including the Vice President) joined Congressional, state and city leaders in expressing disappointment that the President's program would leave transit-aid funds subject to the annual mood of Congress.

In the weeks since President Nixon announced his program (RA, Sept. 1, p. 28), a powerful effort has been waged to achieve a compromise on transit funding. To find out precisely what has been accomplished, Railway Age Editor Luther S. Miller and Washington Editor Frank Malone talked last week with Robert M. Coultas, newly-named executive vice president of the Institute for Rapid Transit. For five years prior to joining the IRT, Coultas served as manager of transportation business development for General Electric in Washington. He is widely regarded as one of the best-informed men in Washington on the legislative process as it affects railroad and urban mass transportation. As chairman of the Railway Progress Institute's Passenger Traffic Committee (before joining the IRT), Coultas was called to Capitol Hill earlier this year to testify on mass transit needs. During recent Senate hearings on the President's transit bill, IRT was represented by Dr. William J. Ronan, president of the Institute (and chairman of New York's Metropolitan Transportation Authority), and Louis J. Gambicini, chairman of IRT's Committee on Government Affairs (and vice president and general manager, Port Authority Trans-Hudson Corp.) The transcript of Railway Age's interview with Coultas follows.

Q. Mr. Coultas, what—realistically—are present prospects for getting a meaningful transit-aid bill out of Congress?

A. I would say the prospects are excellent, certainly much better than they were just a few weeks ago. Senator Harrison Williams of New Jersey has introduced amendments to the Administration's Public Transportation Assistance bill that would give it the teeth we feel it needs. And Transportation Secretary John Volpe, in his recent appearance before the Senate Subcommittee on Housing and Urban Affairs, indicated strongly that the Administration would support the kind of changes that these amendments propose. This could be a very important breakthrough.

Q. What precisely was wrong with the Administration's bill?

A. Let me say first that the Institute for Rapid Transit feels that the Administration's bill is an important step forward, despite what we regard as its drawbacks. All of us concerned with the problems of balanced transportation owe a great debt of gratitude to the President and his advisors, especially within the Department of Transportation, for recognizing the enormous dimensions of this problem and for trying to come to grips with it. But the Administration's bill does have a serious basic deficiency, as Dr. Ronan pointed out in his own testimony on S. 2821.

Q. And that deficiency is . . . .

A. As Dr. Ronan explained, the bill introduced by the Administration does not really provide for long-term financing and commitment. It seeks to achieve this long-term commitment through a so-called "contract authority" by authorizing the Secretary of Transportation to enter into binding contracts on mass transportation projects. However, and this is the critical point, contract commitment can only be made as annual appropriations of the Congress are made. Thus it is not possible for the Secretary to obligate more than $300 million the first year of the bill, nor more than $400 million the second year and so on. Hence, the mass transit systems and the state and local governments still have no long-term assurance of federal funds. Yet long-term commitments are essential for building new systems and modernizing and extending older ones. The BART system in San Francisco is taking a decade to complete. In the New York area it will take up to ten years to complete the present program. So the basic drawback in the Administration's bill is that it would not permit funds to be committed until the actual year of authorization is reached. This fails to meet the need for assured financing that has been so eloquently described by Secretary Volpe.

Now that is the position of the IRT on the Administration bill, and it is substantially also the position of the American Transit Association and the National League of Cities and many others, including scores of Congressmen, who have fought so long and so hard for a meaningful Federal transit program.

Q. How precisely would Senator Williams' amendments change this?

A. In order to eliminate the need to go back to Congress each year for an annual appropriation—and we all know what an iffy business that can be—Senator Williams proposed that all of the funds for the first five years be authorized for commitment immediately upon enactment of the bill. The Secretary of Transportation could thus enter into contractual obligations during the first year for a period extending over up to five years. Congress would retain its right to revise the sums authorized for expenditure to the extent that obligations have not been made within the authorization. This device has been used again and again by Congress to provide the kind of continuity which we feel

Photograph by Maurice Mates

"Long-term assurance of federal funds is essential"

is so essential if our towns and cities are really going to come to grips with their transportation problems.

Q. The President's program called for $3.1 billion for the first five years with a first-year authorization of $300 million, rising to $1 billion annually by 1975. Would these amounts be affected by the proposed changes?

A. No. The actual payout of money would remain as proposed by the President. The important change would be the ability to obligate for more than one year at a time. City X must have the assurance that if it begins digging a subway this year it will not be left with a mere hole in the ground next year. Bear in mind that local and state governments are ready to act in increasing numbers. However, to participate they must borrow money for their share. Local governments cannot get support for a major long-term public transportation project unless there is assurance that the federal government will be able to pay its share over an equally long period of time. The Administration bill is, as you know, a two-thirds federal, one-third local proposition.

Q. Then the immediate effect of the Williams amendment would be to guarantee the ability to obligate $3.1 billion for five years immediately upon passage of the bill?

A. Exactly. While the Institute for Rapid Transit continues to believe that a trust fund approach is the right approach, we feel that we can support this measure as amended.

Q. And there is reason to believe that the Administration will go along with these changes?

A. Secretary Volpe so indicated, and while I cannot speak for the Department of Transportation I am informed that they are extremely hopeful that a compromise along these lines can and will be worked out. Mr. Volpe's exact words at the Senate hearing were these: "We will be willing to work with your committee on a five-year contract authorization as long as there is a schedule for orderly spending of the money. I am sure we can arrange to assure the long-term availability of these funds." Since the actual payout of funds would be as originally recommended by the President, I would think that the Secretary's provision for orderly spending would be met. I am confident that DOT officials know the shortcomings of the Administration's bill. Specifically, I am referring not only to the Secretary but to the Urban Mass Transportation Administrator, Carlos Villarreal, and the assistant secretary, J. D. Braman.

Q. How soon can we expect final action on a transit bill?

A. I think we can reasonably expect a decision in 1970.

Q. What happens to the existing urban mass transportation program, which amounts to $175 million this year, pending final action on the new bill?

A. The House of Representatives just last week passed a housing bill which amends the Urban Mass Transportation Act of 1964 by authorizing $300 million for fiscal year 1971. The Senate housing bill, which was passed earlier, includes an amendment incorporating the same provisions. The House and Senate bills differ on non-transportation matters, but we can be reasonably certain that the Urban Mass Transportation Act amendment will survive. Now, should the Administration's Public Transportation Assistance bill become law, it would supersede the urban mass transportation provision of the Housing Act. In any event, the $300 million for fiscal 1971 provided in the housing bill is identical to the amount proposed for fiscal 1971 in the Administration's program as outlined in S.2821.

Q. You have been active on the Washington scene for five years. In that time have you observed any substantive change in the attitude of Congress toward mass transportation?

A. There is no question that the mood of Congress has changed. We did get the Urban Mass Transportation Act of 1964, and while it has fallen far short of meeting the needs of our cities, it was a key step toward the kind of legislation we see Congress contemplating today. For many years, members of Congress, along with a great number of other people, felt that the automobile alone was the answer to our mobility problems. But we have seen our cities paved within an inch of their lives, and far from solving the problem, reliance on the automobile has only compounded it. Congressmen now know that a great new step must be taken. I believe they are ready to take it. It is clear that members of Congress in greatly increased numbers believe in federal assistance for public transportation as one of the most readily available means of alleviating some of the most difficult social problems of the urban areas. This is why we see an unprecedented number of transit-aid bills before the 91st Congress. These are bills offered by key members of Congress representing almost every part of the nation.

Q. Where does the Institute for Rapid Transit fit into the Washington picture?

A. As representatives of the rail transit industry, our job, as we see it, is partly to help educate our public officials and our legislators to the need for balanced transportation. It was with this in mind that Dr. Ronan and our board of directors decided to move IRT's headquarters from Chicago to Washington. I recall well that when the board of governors of the Railway Progress Institute decided to move the RPI to Washington, they said they were doing so because they wanted to be "where the action is." That is precisely what motivated the IRT. A great education and information

job must be done at the highest levels, by advocates of balanced transportation. We want to do our part.

Q. Does this mean that IRT has changed direction completely from its former technical orientation?

A. By no means. We have simply added what we feel is an important new dimension to the IRT's work. We continue to be very much interested in the technical progress of the rail transit industry. At our board meeting two weeks ago the decision was made to commit a portion of our modest financial reserves to get a research program started, hopefully with government assistance. Two specific areas that we are interested in at the present time are wheel harmonics and ventilation. If anything, we hope to be doing more such work in the future than we have done in the past. But we also recognize the need—as I believe all transportation interests have come to recognize in recent years—for an aggressive education and information program in Washington. The highway people have done their work, and they have done it well. They have *their* trust fund. And I'm all for that. We need our highways. We need more highways. But we also need mass transportation. We need, in fact, *all* of the transportation we can get—however many highways are built, however many new transit systems are brought in, we still probably will not have enough to meet the great demands ahead. So today not only do we have the highway people working for highways. We now have those representing mass transportation working together for a common cause—the rail transit people along with the bus people—and they are working side by side with organizations representing our cities and our counties.

Q. Is the Institute for Rapid Transit adequately supported by the industry it represents?

A. We have a solid base of support for which we are grateful. Our membership includes all of the rail transit operating authorities and many of the major transit suppliers. But our membership participation can and must be much broader. For example, we need and expect to get the support of the metals and concrete industries and the electric utilities, and also more of the consulting firms.

Q. Getting back to the President's proposal—is $10 billion over a 12-year period sufficient, in the IRT's view, to meet foreseeable transit needs?

A. It is an important first step but only that. Again as Dr. Ronan has pointed out in his Senate testimony, we estimate that rail rapid transit needs—subways, commuter railroads and other guided systems for moving people—will require $17 billion for essential improvements and extensions to existing systems, and for new systems that are urgently needed An extra $2.5 billion is needed for bus systems. We are therefore talking about a clear need in the next decade of $20 billion. So the Federal government's assistance certainly should be no less than $10 billion in the next decade.

Q. How much of the $10 billion proposed by the President would you guess may ultimately be spent for rail transit?

A. I would say at least two-thirds.

Q. Assuming that the necesary funding is provided, where do you believe we will see new rapid transit systems either in operation or under construction in the next decade?

A. Washington must go at the top of any such list. If all goes well, the first shovel on the D.C. Metro will be turned at 3 o'clock on the afternoon of Dec. 9. Beyond that, I think we are going to see new systems in Seattle, Baltimore, Atlanta, Pittsburgh, Los Angeles, southeast Florida, St. Louis and the Twin Cities.

Q. Will these be conventional systems as we know them today?

A. Many of them will be. We have pressing problems today, and we are going to have to use today's technology to solve them. But new systems will be meshed in, such as Westinghouse Electric's Skybus and General Electric's Aerial Transport System. As we grapple with today's problems, we cannot forget those of tomorrow, and I foresee whole new systems evolving as we press on with research and development in mass transportation. ■

Why Nixon rejected a transit trust fund

"I would now like to address, as forthrightly as I know how, the question which has been asked in the press, by the industry, and by some members of the Committee [Senate Committee on Banking and Currency].

"The establishment of a trust fund was very thoroughly considered by the Administration. The essence of the trust fund concept, as it exists for highways and as it is proposed for airports and airways, is the contribution of revenues into the fund from those who will use the facilities created by expenditures from the fund. As the term indicates, these are revenues held in 'trust' by the Government in behalf of the special taxpayer.

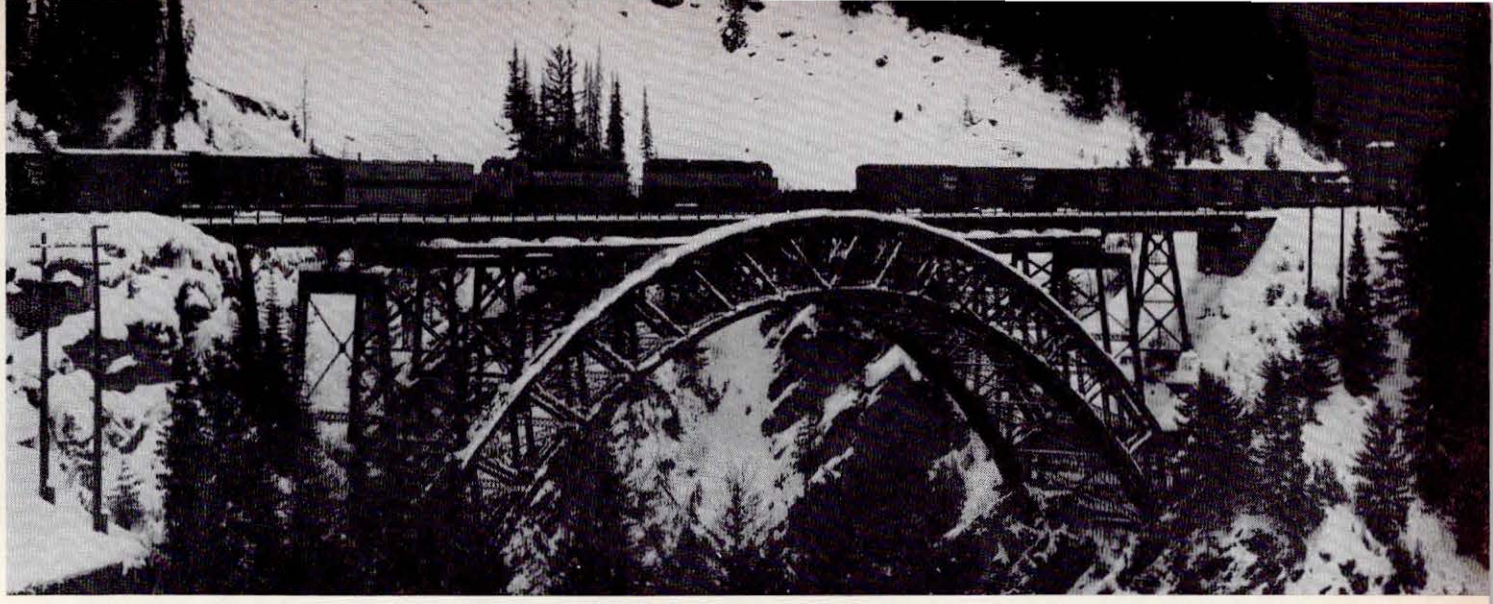
"As I stated earlier, one of the major problems facing public transportation has been the decline in passengers. To impose a special surcharge on the already-high bus and subway fares would simply accelerate the trend to private automobiles by some users, further decrease transit revenues, and place a levy largely on those who can least afford to pay, and for whom prospects of owning a car are quite dim. Therefore, with respect to the proposed public transportation program, it is simply not feasible to levy a direct tax on the user.

"In the face of this reality, consideration was given to funding a public transportation trust fund through taxes on indirect beneficiaries. The auto excise tax was one of those considered. Such a tax would have to rest on the theory that the users of private autos would benefit by the relief in highway congestion occasioned by improved public transportation. We concluded that this argument was simply too tenuous and would not stand up.

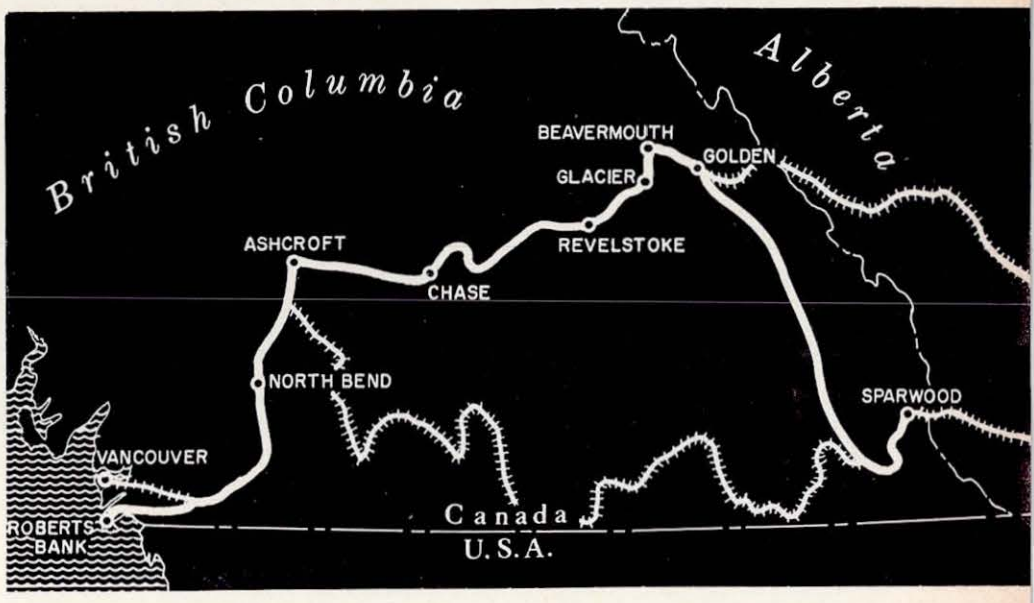
"We also considered the possibility of imposing sumptuary taxes. But, like the auto excise tax, we were forced to conclude that there was no sound basis for selecting a special group of taxpayers to bear a burden which was not peculiarly theirs by reason of use or direct benefit.

"The Administration's final decision to fund the public transportation program from general revenues flows from the inevitable conclusion that public transportation is a public responsibility. This responsibility should be met by all of the taxpayers, not by a selected group of them."

—DOT Secretary John A. Volpe, testifying on S. 2821.



TOUGH TERRAIN like this at Stoney Creek bridge, will be traversed by big coal trains, was proving ground for robot operation. Route combines CP's secondary and main lines, as shown in map below.



CP spends $20 million on unit trains

The big trains are for hauling coal for Japanese steel mills.

In about two months one of North America's most elaborate unit-train operations is scheduled to start in western Canada. When early in 1970 the first Canadian Pacific train, loaded with export coal bound for Japan, rolls into Roberts Bank, B. C., it will culminate several years of planning, pricing, testing and building.

New cars and new locomotives, some operated remotely, will make up the trains. They will be serving the newest deep-water port on the Pacific Coast. CP Rail's investment of nearly $20 million for its big coal trains has been made following the signing of long-term contracts for coking coal which will be supplied to Japanese steel mills by Kaiser Resources, a subsidiary of Kaiser Steel.

● **Technical advances.** Coal has been mined in the Crowsnest area of southeastern British Columbia for well over a century. Dieselization of Canadian railroads and introduction of other home heating fuels put the industry there in a decline in the early 1950s. Because the coal is a metallurgical quality bituminous, Japan became interested in the Crowsnest and has been taking 450,000 tons of it annually for the past five years. With the ten-fold expansion required under the new Kaiser contracts, mining is being converted to the highly mechanized open-cut process. Simultaneously, CP Rail's rates are going down.

"With the freedom in rate-making granted under Canada's National Transportation Act passed in 1967," explains S. M. Gossage, vice president of CP Rail, "we can make rates to encourage shippers to take advantage of today's bigger, more varied and more specialized freight cars. Coal probably offers the greatest opportunity for low-cost integrated transportation. It has demonstrated itself as an ideal commodity for unit-train operation."

● **Minimized costs.** H. M. Romoff, manager of research for Canadian Pacific adds that proper pricing can encourage shippers to arrange their demands on railways to minimize transportation costs. "Unit trains are tailored to capitalize on essentially all the favorable cost and service features of railways," says Romoff. "Weight per car is as high as possible, there is minimal car delay, seasonality is eliminated, regularity of shipments is insured, multiple-car handling is carried to its limit, switching requirements are minimized, and in-transit times are standardized."

He adds that grain, potash and sulfur all offer advantages in unit-train handling much like those being exploited in the new coal movement. The rate for the nearly 700 miles from Sparwood, B.C., to the port, 20 miles south of Vancouver, is approximately $3.50 per ton, about 65% of that in effect for conventional transportation of coal.

CP's operating officers knew from the beginning that they would be running extremely heavy trains over some

of the most rugged terrain traversed by any railroad. They anticipated a need for using remotely controlled units to move the big coal trains over the Selkirk Mountains. Tests were initiated in 1967 by Gossage; J. N. Fraine, vice president of CP's Pacific Region, and H. W. Hayward, chief of motive power and rolling stock.

● **Role of the robot.** Without remote units, the maximum that four 3,000-hp head-end units assisted by three similar pusher units could move up the 2.2% Beaver Hill was 8,400 tons. Even this was subject to reduction for cold weather and during snows which affected wheel-to-rail adhesion.

Using four remotely-controlled units in the body of the train to supplement the four head-end units, and adding one or more manned pusher units, the testing program started with trains of 9,000 total tons, increasing in steps through 12,000 and 13,200 to 14,200 tons. At the last stage the train required thirteen of the six-axle, 3,000-hp units to handle a train from Beavermouth to Glacier.

C. W. Parker, assistant chief of motive power and rolling stock, says CP's operation is the only one utilizing multiple-unit pushers in addition to four or five remotely controlled locomotives in a single train. He adds that the test program embraced more locomotives than any other railroad and involved high drawgear stresses, more severe grades and a greater multiplicity of tunnels.

The ability to pull increased tonnage is just one of the advantages CP Rail has developed in the course of its robot testing. ● Some others:

—Difference in brake-pipe pressure between the front of a train and the caboose is reduced on a fully charged train;

—Increased brake pipe pressure at the rear results in higher average brake cylinder pressure throughout the train;

—Brake release times are appreciably shortened;

—Charging times are reduced, particularly in cold weather.

CP is currently equipping a series of former express cars with Radiation Locotrol equipment so they may be utilized with remotely controlled locomotive units in the train. Simultaneously, the 29 new 3,000-hp units being built to power the trains are getting Locotrol head-end installations.

● **Operating procedures.** Westward, the 105-car, 13,800-ton trains will be handled from Sparwood to Golden, 222 miles, by four 3,000-hp units at the head end. At Golden, a four-unit head-end locomotive group equipped with the master remote control apparatus will take the place of the units which brought the train from Sparwood. Approximately 40 cars back a multi-unit remotely controlled group will be placed in the train. CP's practice is to have the robot car trailing the mid-train units.

This train will proceed 28 miles to the foot of the 2.2% Beaver Hill. There, a multiple-unit pusher under the control of a second engineman will be put in the train about 40 cars behind the remote units. Leading master unit, pusher and caboose all have voice radios to synchronize the starting operation. The pusher will assist the train to Glacier, 22 miles, and then the lead and midtrain units will operate through to Roberts Bank, surmounting two other major summits unassisted.

● **Robot operation.** CP has found that to utilize remote units successfully in its territory, it is necessary to integrate the control of the two power groups so that both tend to maintain the same speed. Most train-handling problems experienced in the testing developed when one portion of the train changed speed relative to the other.

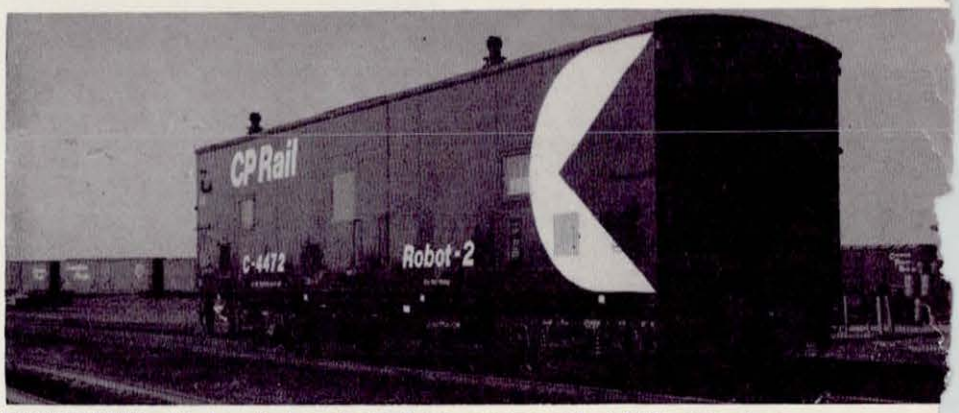
Repeated tests with trains of 13,200 and 14,200 tons, using 4-4-4, 4-5-4 and 4-6-3 combinations of motive power, established that the remote group should expend at least 25% of its tractive force in pushing and the remainder in pulling. The pusher should be located so as to push with 40% and pull with 60% of its tractive force. While locating remote units further back has an advantage from a braking standpoint, the possibility of train separation increases on CP's heavy grades when the slave group is more than 40% of the train length from the lead locomotive units.

MLW/Worthington, which is building the 29 3,000-hp locomotives reports they are fitted with several special features. Each unit is powered by an Alco 16-cylinder engine coupled to a traction alternator. The Canadian-designed Hi-adhesion trucks are characterized by their low weight transfer and metallastic suspensions. The 392,000-pound unit has special high-capacity draft gears with alignment control and Type F couplers.

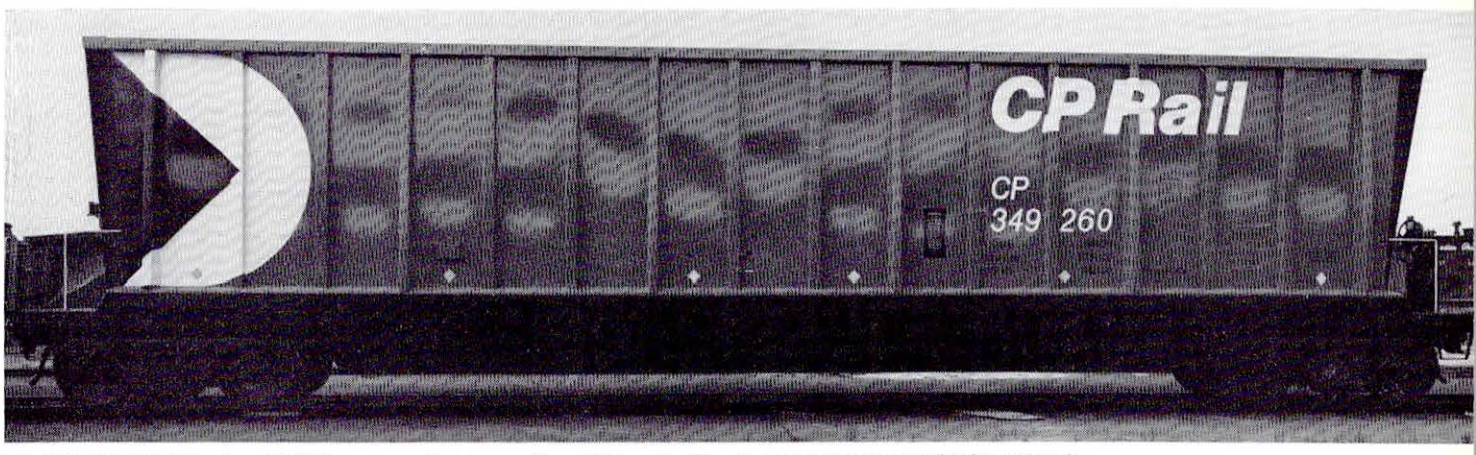
The locomotive air-handling system has a single mechanically driven blower to supply all cooling and combustion

SIX-MOTOR 3000-hp units are now being completed by MLW/Worthington.

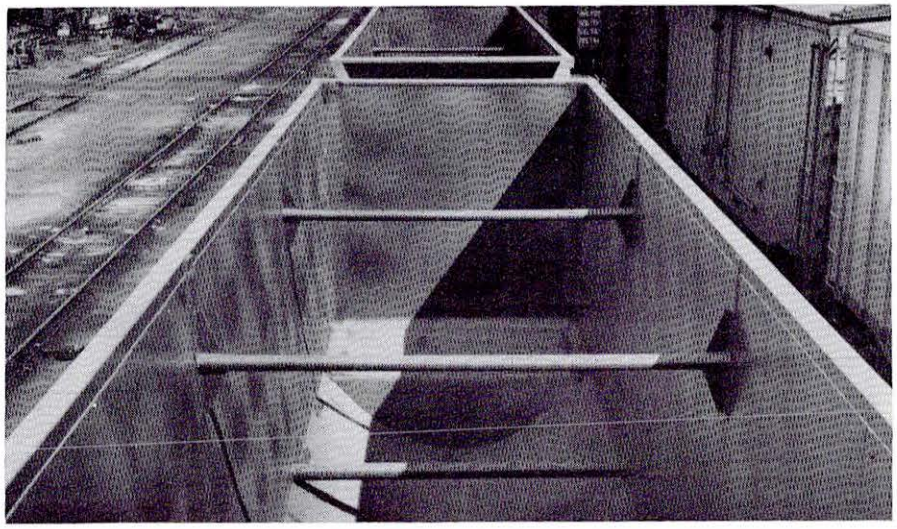
HUSKY HARDWARE...



ROBOT CARS with Locotrol equipment are coming out of CP's own shop.



BATHTUB GONDOLAS of 105-ton capacity are rolling off production lines of Hawker Siddeley Canada.



ROUNDED BOTTOM lowers gondola's center of gravity and speeds its unloading.

air, including the cooling of dynamic brake grids. The aftercooler cooling has been incorporated in the main radiator system, eliminating a separate radiator and shutters. Each unit is fitted with a 180-gallon auxiliary lubricating oil reservoir to extend refill intervals.

● **Speed controls.** The unit is fitted with a Vapor Pacesetter automatic speed control, combined with special grade balancing brake. This equipment will be utilized during the slow-speed loading of the trains at Sparwood.

Coal will be cleaned and dried prior to its storage in 60,000-ton silos from which it can be discharged rapidly into the train.

At Roberts Bank, Westshore Terminals—another Kaiser subsidiary—has constructed a $9 million unloading and storage facility with car dumper that will permit emptying 12,000 tons of coal from a train in four hours. Belt conveyors will move the coal either to stockpiles or directly to the 70,000-ton colliers which Japanese shipyards have been building for the trans Pacific run.

● **Hopper vs gondola.** In the course of designing the unloading system, consideration was given to both bottom-dump cars and solid-bottom, rotary dump gondolas. Because the bottom dump cars will not operate efficiently in freezing weather, and because the estimated economic balance between the two types proved to be about 300 cars, the decision was made in favor of the gondolas. This has proved to be more readily justified since CP's initial order for 348 gondolas costing $6 million was increased in August by 230 more cars costing an additional $4 million.

All cars are being built by Hawken Siddeley Canada at Trenton, N.S.

The car was designed by CP's mechanical department. It features tapered sides and ends with rounded bottom reaching down to within 12 inches of the rail. H. W. Hayward stresses that "the configuration is unique and has several operating advantages. It permits free flow of coal during unloading, reduces the residue in the car to a minimum, and lowers the center of gravity."

The concept of the "bathtub" gondola, as it has come to be known, originated several years ago in CP's design group. While there are 578 of the 53,000-pound cars in the order, they are not all duplicates. Most will be fitted with a rotary coupler at one end. Some 15, however, will have rotary couplers so they may be dumped while coupled to the mid-train motive power. About ten cars at the front of each train will have dual braking systems so they may be utilized along with the locomotives in controlling speed under certain operating conditions.

The bodies are all the same—all having the outward 3-inch slope from bottom to top of sides and ends. There are 3-inch radii at all intersections of sides, ends and floor. Interiors are also coated with Polyclutch primer to facilitate flow of lading.

The bathtub bottom is possible only because the car has no center sill. Longitudinal forces are transmitted to shear plates and then to the sides. To avoid any possibility of rock-and-roll problems, while also lowering the center of gravity, the car's truck center distance is 45-feet—well over the 39-foot standard rail length. Trucks are fitted with special two-level springing in which one set of springs carries the empty car and a second set comes into play when the 105 tons of coal are loaded aboard.

● **High mileage operation.** With a 72-hour cycle for these trains, CP expects each car to operate about 150,000 miles annually. Hayward said that, based on the experience of other roads operating unit coal trains, he expects wheels, couplers and knuckles to represent the items of maximum wear. CP is establishing a maintenance facility for the gondolas at its Vancouver-area light car repair facility. It is probable that blocks of cars will be cut out of trains so that maintenance may proceed while the train is making one of its 1,370-mile round trips.

Periodic lubrication of roller bearings will initially be on the two-year cycle common to all CP equipment. This interval may have to be shortened because of the high mileages these gondolas are scheduled to make. ■

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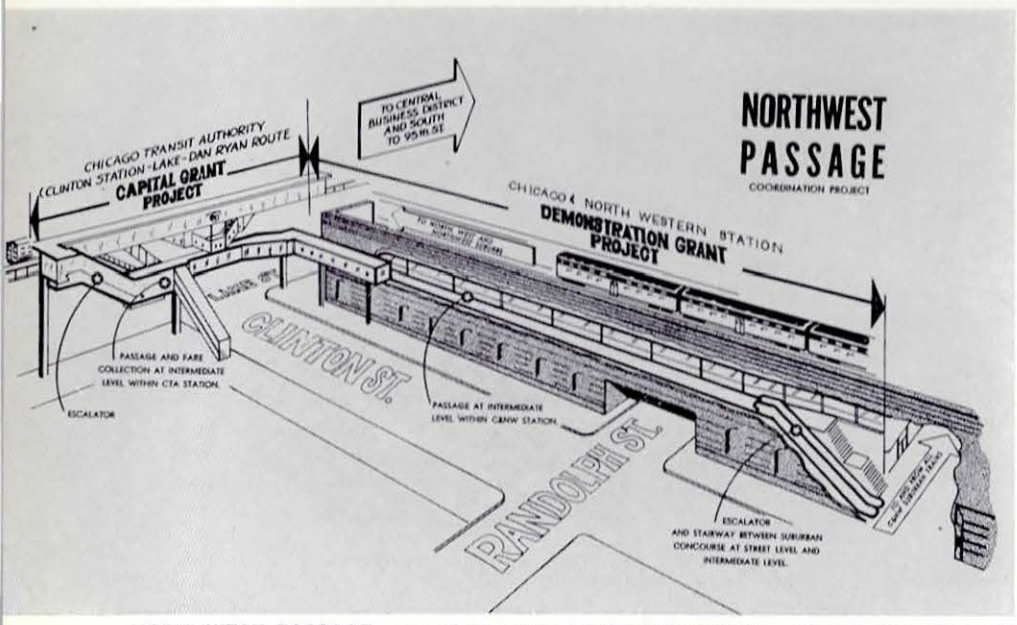
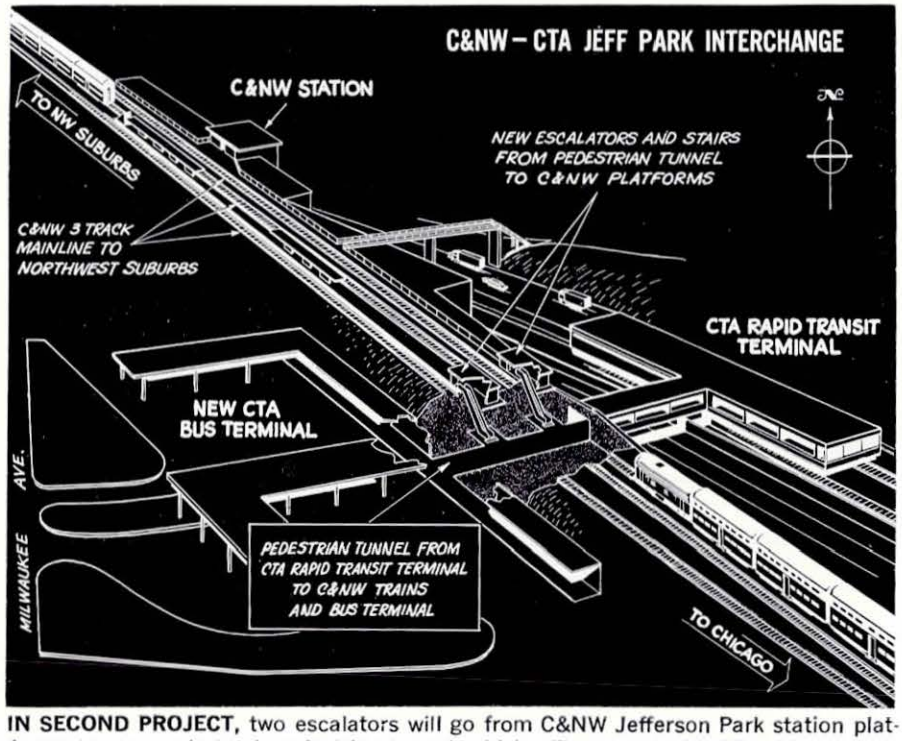

NORTHWEST PASSAGE
COORDINATION PROJECT
CHICAGO TRANSIT AUTHORITY (CLINTON STATION-LAKE-DAN RYAN ROUTE CAPITAL GRANT PROJECT
TO CENTRAL BUSINESS DISTRICT AND SOUTH TO 95th ST
CHICAGO & NORTH WESTERN STATION DEMONSTRATION GRANT PROJECT
CLINTON ST.
RANDOLPH ST.
PASSAGE AND FARE COLLECTION AT INTERMEDIATE LEVEL WITHIN CTA STATION
ESCALATOR
PASSAGE AT INTERMEDIATE LEVEL WITHIN C&NW STATION
ESCALATOR AND STAIRWAY BETWEEN SUBURBAN CONCOURSE AT STREET LEVEL AND INTERMEDIATE LEVEL

NORTHWEST PASSAGE, one of two new CTA-C&NW projects, will link the railroad's downtown station with the Transit Authority's Clinton-Lake Streets L station.

Chicago plans new rail-to-rail links

Joint efforts by the city's Transit Authority and the C&NW are designed to take even more motorists off the expressways.


C&NW – CTA JEFF PARK INTERCHANGE
C&NW STATION
TO NW SUBURBS
ONE
NEW ESCALATORS AND STAIRS FROM PEDESTRIAN TUNNEL TO C&NW PLATFORMS
C&NW 3 TRACK MAINLINE TO NORTHWEST SUBURBS
CTA RAPID TRANSIT TERMINAL
NEW CTA BUS TERMINAL
MILWAUKEE AVE.
PEDESTRIAN TUNNEL FROM CTA RAPID TRANSIT TERMINAL TO C&NW TRAINS AND BUS TERMINAL
TO CHICAGO

IN SECOND PROJECT, two escalators will go from C&NW Jefferson Park station platforms to new undertrack pedestrian tunnel, which will connect with CTA rail terminal.

In terms of public transportation, Chicago probably ranks as the wealthiest of the nation's large metropolitan areas. It has nine suburban railroad lines serving it, a fleet of 1,300 rapid transit cars operating over 192 miles of urban trackage, plus a fleet of about 3,200 buses.

● **More on the way.** Not satisfied to have just a wealth of public transportation services, Chicago is setting out to become super wealthy. A pair of projects are now afoot to set the pace for transforming all the individual modes of public travel into one cohesive network. The city's two largest people movers—the Chicago Transit Authority and the Chicago & North Western—are planning to open a pair of new rail-to-rail links later this year or in early 1970.

One of the ultimate objectives of the projects is to broaden job opportunities by making job centers more accessible. Close to 90% of all persons working in the Loop now use public transportation. The new rail-to-rail links are being established to lure still more motorists off the expressways and streets—"maybe as high as 13,000," says George L. DeMent, CTA chairman.

● **Northwest Passage.** One of the two joint projects, called the Northwest Passage, will link the railway's downtown station with the Clinton-Lake Streets L station. This 600-foot passageway, which will provide commuters with full weather protection while transferring from one service to the other, will feature carpeted walkways plus piped in music. Still another type of protection will be provided patrons—constant surveillance of the passageway by closed circuit TV.

The second project in the joint effort involves the suburban line's Jefferson Park station adjacent to the Kennedy Expressway. Two escalators are being installed from the C&NW station platforms to a new pedestrian tunnel under the tracks. This tunnel will connect with the CTA's Jefferson Park rail terminal. This project could be called a rail-to-rail-or-rubber link because the tunnel also connects with a large CTA bus terminal. The CTA rail terminal is the terminus of the new 5.2-mile median-strip transit line nearing completion in the Kennedy Expressway.

● **Two types of Federal aid.** The two projects are costing approximately $1 million altogether. The U.S. Department of Transportation, the City of Chicago and the railroad are sharing the costs. The Northwest Passage project, report the participants, is the first transit project in the nation combining both Federal grant funds and Federal demonstration project funds in a single coordinated plan.

Larry S. Provo, C&NW president, feels that the rail-to-rail coordinations mark "the first step toward connecting the fragmented corridors of rail movement in the city with all-weather pedestrian interchanges to offer a truly convenient transfer for Chicago and suburban passengers in either direction."

DeMent added that the CTA looks upon the coordinated effort as "the first giant step to break down long-standing barriers to convenient movement of people to and from certain areas, making job opportunities in the outer suburbs more attractive and accessible to Chicago residents." At the same time, he continued, the linkup at both points will benefit suburbanites who want to reach their places of employment in the city without traveling by automobile.

Residents on Chicago's south and west sides, for example, will be able to travel all-rail via the Dan Ryan Expressway median-strip transit line, or on the Lake St. L, and then transfer at the Northwest Passage to the C&NW so as to reach any of 50 suburbs served by the road. Residents along the Congress and Douglas transit lines (west part of the city) will be able to use the CTA service directly to Jefferson Park, transferring there to the C&NW suburban line that terminates in Harvard.

● **Fast connections.** Eastern and southeastern points in the Loop will become more accessible for C&NW commuters from the north and northwest Chicago suburbs when the Northwest Passage opens. These points will be only four to six minutes away from the station via the L, says Provo. "This, in my opinion," he added, "is faster than a pigeon can fly from the North Western station to the east end of the Loop area."

Just as Chicago residents will be able to use the all-rail service to reach places of employment in the north and northwest suburbs along the C&NW, persons living in these suburbs will be able to use the reverse procedure to reach their job sites in the city's south side, Provo said.

Chicago has had the essential elements for a coordinated rail system reaching out to the far corners of the central city and suburbs, Provo pointed out. "But until recently," he said, "no attempt has been made to tie together these mass transit corridors for the convenient interchange of passengers." He added that the proposed downtown subway system for Chicago is the most significant step to be taken this century to improve circulation of people. The system would provide direct interchange between the entire system of suburban rail lines and the CTA rapid transit lines, creating a truly coordinated network. ■

LUTHER MILLER

AS THE EDITOR SEES IT

"ALL I HEAR IS TRANSIT," a railroad man complained to an informal Washington gathering the other day. "The President is all steamed up about it, and so is the Secretary of Transportation, and now Congress is getting worked up. All well and good, I say. I only hope rail transit gets its share. But . . ."

"WHAT ABOUT RAILROADS?" The speaker—a railroad public relations man who has climbed the Capitol steps many a time on behalf of a square deal for the steel wheel—warmed to his subject. "Doesn't anybody care about *our* crisis? Aren't railroads worth a special message to Congress? It isn't as if *we* were asking for $10 billion. All we want is a fair chance to do our job. But all we seem to get is a friendly pat on the back."

IT IS TRUE THAT THE PRESIDENT and the Department of Transportation have moved uncommonly fast to come to grips with the transit crisis. Much faster, in fact, than most of us thought just a few months ago, when DOT Secretary John Volpe was saying that he would not have a master plan ready for Congress before 1970. But the nation let Washington know that it could not wait. The master plan was unveiled in August. It is now at the hearing stage in Congress, and chances for its approval look good.

THE REASON FOR THIS URGENCY in dealing with the problems of public mass transportation is not hard to find. The fact is, as Secretary Volpe has pointed out, that we permitted public mass transit to wither away—in many cases to die altogether—to such an extent that we now find ourselves having to start almost from scratch. It is almost as if we are having to re-invent mass transit all over again, after years of total infatuation with the automobile.

THERE OUGHT TO BE A LESSON here for those in Washington, and elsewhere, who have the power not only to cope with crises but to head them off. If Washington can confront the railroad problem *now* with the same urgency that it has faced up to the transit problem; if the national transportation policy can be restructured *now* to erase obsolete regulatory restraints and one-sided favoritism; if we can declare a moratorium on further studies (too many good ones are already rotting on DOT's shelves) and start *now* to work toward the creation of the great inter-modal transportation companies that alone can meet future demands—if we do all of these things now, maybe we will not have to re-invent a transportation system tomorrow.

IT BEGINS HERE—Current data on every car, locomotive and train move on the UP is fed through a network of IBM 1050 machines to central COIN computer in Omaha.

How Union Pacific

Union Pacific's real-time, computer-communications system called COIN was demonstrated simultaneously in 18 U.S. cities on Oct. 30. One of the system's prime benefits is its ability to greatly increase car utilization.

COIN—an acronym for complete operating information — continuously monitors operations over the UP's 9,600-mile system in 13 western state. The monitoring is done through a network of 54 IBM 1050 machines strategically placed in 39 UP yard offices.

● **Management aid.** The up-to-the-minute data on operations over the entire Union Pacific provided by COIN are permitting more timely and meaningful decisions by management. Each of UP's COIN-equipped traffic offices receives three individual manifest reports every day. Each report indicates the status of shipments headed for destinations in the particular office's territory as well as providing current information on moving shipments that originated in that office's territory.

"We have stepped into the 21st century over night," Edd H. Bailey, UP president, said last week. "We now have at our fingertips information on the status of equipment, trains and merchandise moving over the railroad that previously took hours and sometimes days to obtain."

● **Central computer.** There are more than 60,000 cars on UP rails at any one time. Every move by every train and every piece of equipment is now recorded on punch cards and fed into the central computer at UP's Omaha, Neb., headquarters when the move occurs.

The central computer digests the information and stores it in its memory banks where it is readily accessible when needed. Simultaneously, the computer transmits the information to any of the 134 locations connected to COIN which may have been designated by the location originating the information.

In this manner, detailed information on each car in a train leaving one yard is transmitted through the central computer to the next yard.

● **Better car utilization.** "With COIN providing up-to-the-minute car movement and location data on all empty freight cars on the railroad," says Jack Bowen, UP general superintendent of transportation, "a 5% improvement in over-all car utilization is definitely attainable and an even higher per cent of improvement is possible."

A 5% improvement in utilization of UP's 67,196-car fleet is comparable to putting an additional 3,359 cars into service. Bowen adds that such an improvement would be equal to a full year's car building and purchasing program and would go a long way toward eliminating car shortages over the entire UP system.

A total of 58 Model 28 Teletype machines has been installed in 53 UP traffic offices in major metropolitan areas from Los Angeles to New York and from Toronto to Atlanta, Ga. Traffic personnel in each office can trace a customer's merchandise moving over UP by merely typing the car

MICROWAVE DOES ITS PART—UP's gigantic microwave setup ties together the whole real-time, computer-communications system. The 600-voice-channel microwave arrangement provides ample back-up capacity to insure instantaneous communication with the central computer in UP's Omaha headquarters.

AND IN OMAHA the computerization for COIN consists of two IBM 360 model 65 machines. One is on-line at all times, with the other in backup status. Also backing up the road's COIN system are two IBM 360 model 30's and one IBM 7080 computer.

keeps track of its trains

number on a Teletype machine. The car number goes immediately to the central computer in Omaha via the road's private microwave system from on-line traffic offices and via leased lines from off-line stations. In less than three seconds, complete information on the car and its current location is being typed out on the Teletype machine in the traffic office where the inquiry originated.

● **Huge microwave system.** Tying the whole COIN system together is one of the most extensive and sophisticated privately owned microwave communications systems in the world. Already more than 3,194 miles of microwave providing 600 voice channels are in UP service. Another 413 miles are under construction.

The microwave system extends from Omaha over the UP main line to Los Angeles and to Portland, Ore. In addition to the transmission of bulk communications and data involved in COIN, the microwave network handles a system-wide direct dial telephone service plus the transmission of numerous signal impulses for two-day radio, centralized traffic control and hotbox-detection equipment.

To accommodate the COIN system, UP's communications department installed 500 Lenkurt 25A data transmission units to provide microwave linkage with the input-output devices. Data channels were also added to support the 121 circuits used by COIN. They provide additional capacity when needed.

All data channels in the system can be checked by meter or by using a test set that simulates computer polling and addressing as well as selected character transmission. When a circuit or computer fails, monitor lights indicate where failure occurred. To insure maximum dependability, backup equipment and several alarm systems were installed. Built-in error control systems are also used to further assure accuracy in data handling.

● **And soon, FLOCON.** To better utilize car information data provided by COIN and to monitor and control car supply and demand over the entire railroad, UP has established a new section in the transportation department. The section is called FLOCON, an abbreviation for flow control. It is made up of a director and six assistants. Each assistant is responsible for the distribution of certain types of cars over the UP system.

Starts in the morning

Every morning at 8 o'clock COIN issues a comprehensive report to FLOCON covering the status of all empty cars on the railroad as of 5 a.m. that day by type of car. The report is broken down and each FLOCON assistant director receives that portion of the report covering equipment under his jurisdiction.

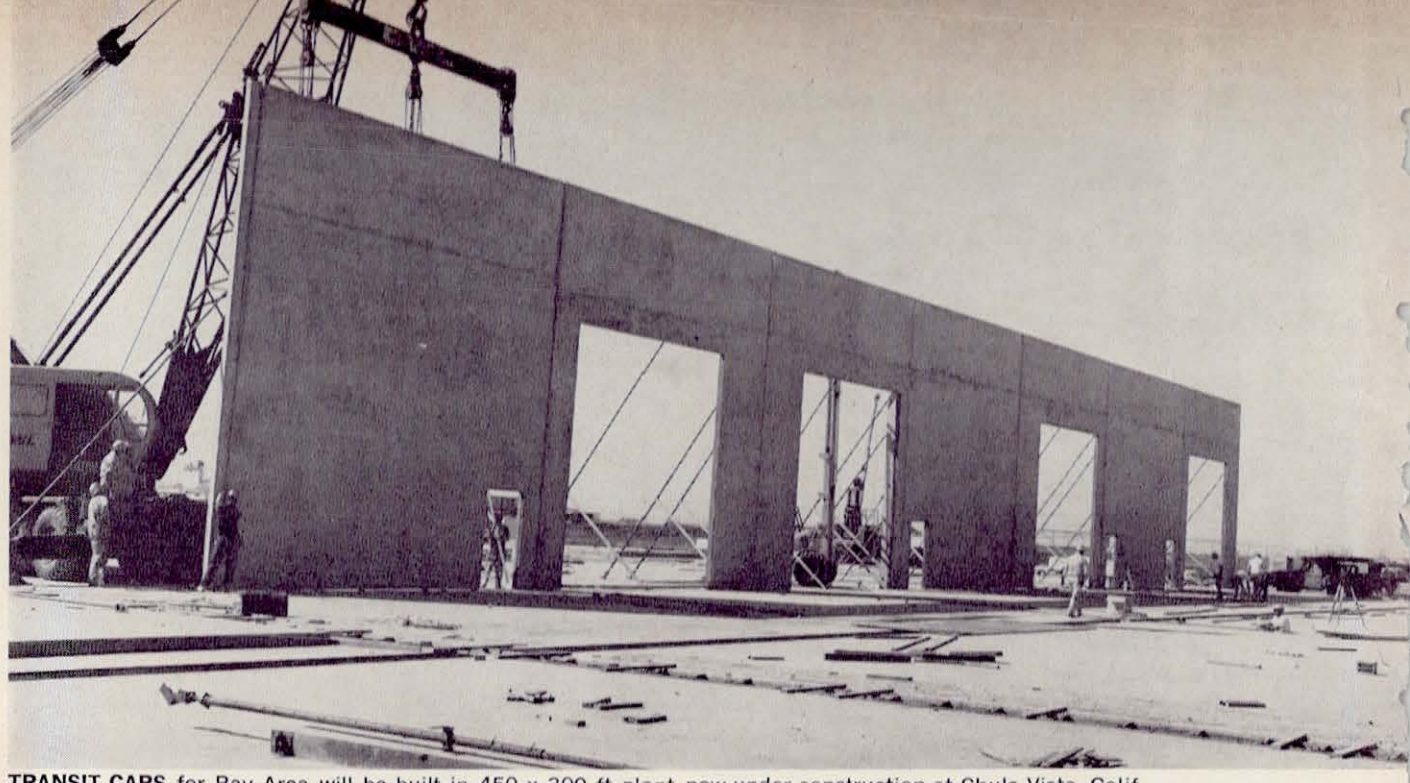
Car requirements are funneled into the FLOCON center each day through a network of 17 district car distributors placed around the railroad. Each distributor collects car orders from shippers in his territory every day, based on shippers' needs seven days ahead. This advance notice provides the necessary time to insure that the proper number of empty cars are sent to the shipper when needed.

● **How reports are handled.** The daily reports are transmitted to the FLOCON office, where they are recorded on a codaphone, by telephone. At the end of each day, car order records from codaphone are broken down into types of cars and sent to the assistant directors of FLOCON responsible for each type of equipment.

The assistants then feed car movement and assignment orders into the COIN system. COIN sends the orders to wherever the cars are located and continues to monitor each car until each has arrived at its assigned destination. If a car so assigned is diverted to another location while en route to a designated shipper, the computer will tell FLOCON and corrective action is taken.

It is also possible to issue blanket orders to COIN assigning empty cars of a certain type to a given area or location. From there on the computer will automatically make the assignment of that type of car whenever empties show up on the railroad.

"We are still finding new ways of utilizing the real-time data being provided by COIN as well as the computer's ability to assimilate such data," Bowen says. "But the improvements already made in our car distribution system are extremely impressive." ■



TRANSIT CARS for Bay Area will be built in 450 x 300 ft plant now under construction at Chula Vista, Calif.

Rohr tools up for BART job

Aerospace manufacturer sees $66.7-million order as the beginning of a lucrative market.

When Rohr Corp. came roaring onto the mass transit scene at mid-year to capture the $66.7-million San Francisco Bay Area Rapid Transit District car contract, people in the rail-oriented segment of transportation went scurrying for their Dun & Bradstreets. Not unlike the public query of "Spiro Who?" at the close of last year's Republican convention, those whose business is rail transit were asking "Rohr Who?"

The curious quickly discovered that Rohr was, for the most part, an aerospace contractor. The California-based manufacturer produces jet engine pods for virtually every multi-engine jet transport. It also manufactures and assembles a variety of other aerospace components ranging from control surfaces to fuselage sections.

● **Built Apollo-tracking antenna.** The title of aerospace subcontractor really could be a misnomer—and not just because of Rohr's entry this year into the transit car field. Early this decade, Rohr came down to earth and entered the communications field as a builder of giant, steerable antenna structures. One Rohr antenna, with a 210-ft dish, was erected in the Mojave Desert near Barstow, Calif. It was this antenna which tracked the Apollo moon shot and helped relay the moon scenes into TV sets across the nation earlier this year. Rohr also builds boats at the Chula Vista (Calif.) plant where the transit cars will be built.

The transit car operations will be housed in a new 137,000-sq-ft building scheduled to be completed and ready for occupancy in January. Car fabrication and assembly will occupy only about one-half of the building, says R. J. Rucci, manager of Rohr's BART program. The other half will be assigned to antenna and marine construction.

● **How Rohr qualified** Actually, the building-sharing by these two operations is not as strange as it might seem. It was Rohr's antenna construction capabilities that helped the company qualify as a bidder for the BART cars. The BART specs clearly stated that anyone bidding for the contract would have to submit data "on not less than five manufacturing projects involving equipment similar to that described which your organization has completed within the past five years." Having never built a transit car, Rohr leaned heavily upon its antenna construction capabilities, as well as on those for assembling aircraft fuselages and assemblies. Obviously, BART was satisfied.

President Burt F. Raynes says that Rohr is really "more of a transportation company" than it is an aerospace subcontractor, and feels the transit car field is a "natural." He sees mass transit as one of the nation's most urgent socio-economic problems, and feels there is a tremendous market potential in the field. Transit car building, in his view, represents a "very logical and promising avenue for growth and diversification." Company sales in fiscal '69 reached $266.1 million, and Rohr management hopes to see an annual growth of 10% over the next five years.

While the BART cars are classified as transit cars, they will be vastly different from anything operating on U.S. rails today. Says Rucci: "It was because BART wanted cars radically improved from anything that had been produced before that we decided to make a serious bid for the contract. We felt that our metal-forming experience along with our knowledge of computer controls and systems engineering would give us a good chance to succeed with the BART order."

● **Others wait and see.** Rohr knows that a lot of people connected with the transit business are maintaining a wait-and-see attitude. Rohr knows too that others have come bounding into the field expecting anything that is earthbound to be a relatively simple system, only to find out that being earthbound actually compounds some problems. But Rohr people think that the company's proven manufacturing ability, its

experience in fabricating and assembling high-precision structures, will prevail. Whereas it does have the wealth of experience plus the precision machinery (much of it designed and fabricated by Rohr itself) to do the metal forming and assembly, Rohr is the first to admit that there are areas of transit car manufacturing with which it is not totally familiar.

This is where others, including Westinghouse Electric, come in. Westinghouse has been awarded the subcontract by Rohr to supply much of the undercar components. This subcontract is reported to be worth about $30 million. "Westinghouse will select the suppliers of most of these components," says Rucci. "Of course, we will be working very closely with them, and we will be doing all the car assembly work at the Chula Vista location."

● **Help from England.** Rohr, too, has sought the aid of transit experts from New York, Chicago and Washington, as well as London, England.

Fabrication of ten prototype cars will start next spring and delivery of the first one will come along toward midsummer. Delivery of these first ten cars is scheduled to be completed before the end of 1970. Along toward mid-1971, Rohr figures to be in full production of the cars and will be delivering at the rate of one per day until the full 250-car order is completed. Special rigs will probably be built, says Rucci, to truck the completed cars to the BART location. Chances are, too, they'll go all the way by truck.

● **On schedule.** Although the new transit car building is not yet under roof, Rucci reports that the work on the BART order is moving along right on schedule. Thousands of man-hours of engineering have already gone into the project, and mock-ups of certain car sections have already been completed. Mock-ups of the attendant's cab plus side and seat sections are now under study. Next month (December), a 21-ft. engineering mock-up of a full car section will be started. Right now, says Rucci, they're leaning toward the selection of cantilevered seats for the car because of the opportunity this design allows for cutting normal maintenance.

Since gaining the BART order, Rohr has shown a curiosity, if not a bidding interest, in other projects involving rail vehicles. For one thing, it purchased a set of drawings and specifications for the Illinois Central double-deck suburban cars, but never submitted an actual bid for the cars. Rohr officials, like Keith Tantlinger, vice president-industrial systems group, have been talking to a great number of potential customers for new transit cars. ■

FRANK MALONE

WATCHING WASHINGTON

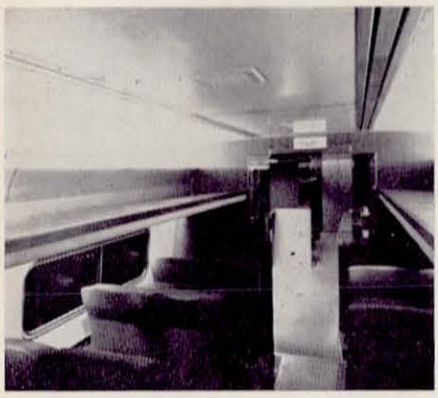
THE INTRIGUING GAME of who controls whom goes on and on. Chicago & North Western, no newcomer to the games railroads play, has asked ICC to collect correspondence which C&NW says would prove Brown Brothers Harriman really runs Union Pacific. The Commission must look beyond the mere fact of stock ownership (BBH has about 3% of UP) to the "realities of the relationship" between the investment firm and the railroad, C&NW says. Actual as well as legal control must be considered. North Western says BBH not only dominates UP but would also rule the planned conglomerate, Union Pacific Corp. And that would bring further discriminatory practices, because BBH is represented on 150 boards of directors.

ICC HAS "DISCOVERY" POWERS IT SHOULD USE, North Western says, to subpoena certain persons to appear with papers in hand before a witness designated by ICC. The *powers* were endorsed by Commissioners in recent Senate hearings, and "this proceeding represents the first major case in which the Commission has the opportunity to implement the practices endorsed." The main *persons* are E. Roland Harriman, BBH partner, Frank E. Barnett, UP chairman, and William B. Johnson, Illinois Central chairman (C&NW wants a look at IC control, too). The *papers* are letters between these men in the last five or six years. The designated *witness* would be North Western itself, which is seeking control of the same Rock Island with which UP wants to merge.

THE LETTERS OF MR. BARNETT, FOR EXAMPLE, would show: (1) the full acquisition plans of Union Pacific; (2) that BBH partners personally selected or dominated the selection of Mr. Barnett for UP and UPC positions; (3) that BBH partners directed Union Pacific corporate policies, actions, hiring and finances; (4) that BBH directed acquisitions by Union Pacific and Illinois Central; (5) BBH, through Union Pacific, caused IC to stay out of UP's Rock Island move, even though IC would be hurt by the merger; and (6) shippers and UP are involved in reciprocal dealing which would increase if BBH acquisition plans for UP and IC are carried out.

A LOOK AT ILLINOIS CENTRAL CONTROL BY UP (and BBH) was requested in January by C&NW in connection with the IC-Gulf, Mobile & Ohio merger. Missouri Pacific previously asked for the same thing, then withdrew its request, then submitted it again separately from any merger. No wonder that ICC is slow to settle merger cases.

NEW PRODUCTS REPORT

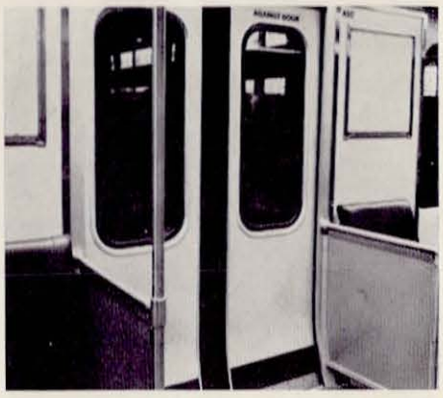


Bonded baggage racks (RA-1)

Rigid sheets of aluminum bonded to a veneer of stainless steel used for the baggage racks of 50 Metroliner passenger cars have been produced through the use of the Cybond 4010 adhesive system and textured for scratch resistance by Ardmore Textured Metals. The racks weigh half as much as solid stainless-steel racks and minimize vibration. Of the more than 6000 24-in. wide panels furnished, there were no rejections because of delamination. *Veneered Metals, Inc.*

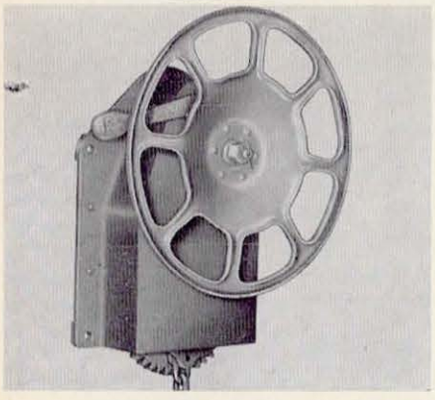
Static inverter (RA-2)

The 100 VA Invertair inverter for powering rapid transit control equipment provides a more reliable replacement for mechanical inverters presently in use. The static inverter operates on input voltage of 36 vdc while producing output voltage of 115 vac ±10%. Outputs are square wave. The rapid-transit designed inverter may also be applied to other uses requiring a-c current from d-c source—up to 100 VA power capability. Unit is equipped with a sturdy mounting flange. *Vapor Corp.*



Subway modesty panels (RA-3)

Panels developed for the Massachusetts Bay Transportation Authority rapid transit cars are composed of two Ardmore textured 0.015-in. stainless-steel veneers on 0.050-in. lightweight aluminum. Voids created by the textured surfaces embossed on panel exteriors are filled with Cybond Adhesive System WE-4531, a low-temperature set 100% solids adhesive. The panels, of about 0.095-in. overall thickness, fit into a slotted extrusion frame. *Veneered Metals.*



High-power handbrake (RA-4)

The Model 6500 handbrake, the first AAR-approved high-power brake, develops a minimum average force of 6,250 lb around a 90-deg sheave wheel with an input force of 125 lb. The brake incorporates the Peacock Micro-Matic pinion assembly which permits release of any degree of force and holds the remaining application whenever reverse movement of the hand wheel is stopped. The handwheel cannot spin of its own accord. Instant release is assured with the trip lever. *Ellcon National.*

Diesel engine oil (RA-5)

The zinc-free 1570 diesel engine oil, a medium viscosity index oil graded S.A.E. 40, contains a balanced combination of dispersant and detergent additive which provides excellent lubricating and cleaning properties under high-temperature, high-output operating conditions. As a result of tests by engine manufacturers and two major railroads, 1570 is listed by locomotive builders for turbocharged and nonturbocharged engines. *Texaco.*

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• Inquiries can be processed only if title and company are shown. 11/3/69

Jon M. Clark
B&O

Tom Johnson
C&O-B&O

William J. Hufnell
Penn Central

E. C. Lawson
Reading

PEOPLE IN THE NEWS

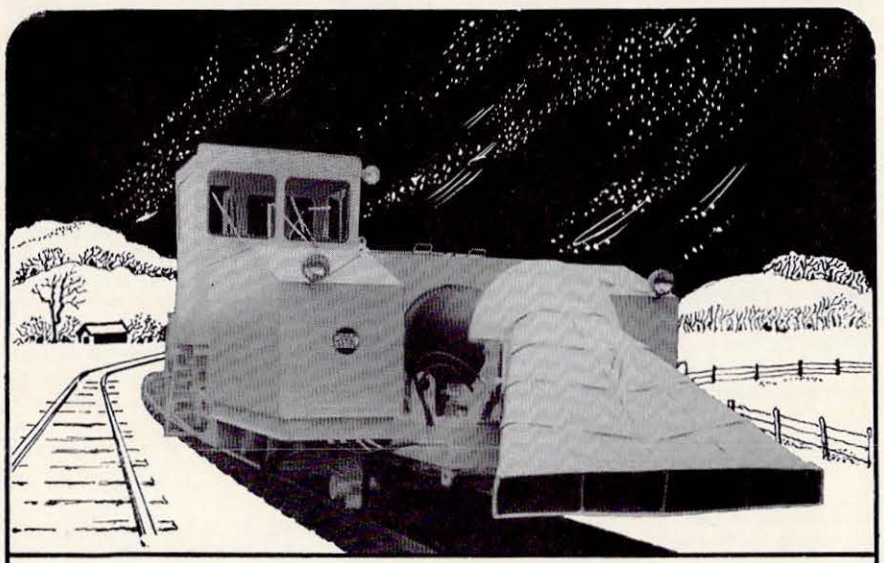
BALTIMORE & OHIO.—Jon M. Clark, assistant regional sales manager, Pittsburgh, appointed director of world commerce, Baltimore, Md., succeeding **Frank M. White, Jr.,** retired.

CHESAPEAKE & OHIO—BALTIMORE & OHIO.—Tom Johnson has been named editor of Chessie News, employee publication of the C&O-B&O. Mr. Johnson has been city editor, Sandusky (Ohio) Register for three years.

LOUISVILLE & NASHVILLE.—Woodson Knight, manager public and company relations, Louisville, Ky., assumed full responsibility for the Public Relations Department on Oct. 15. **Warren A. McNeill,** director of public relations, has retired, but will be available for special assignments.

PENN CENTRAL.—William J. Hufnell appointed superintendent–labor relations and personnel, New Haven Region, New Haven, Conn., succeeding **James J. Duffy,** retired after 32 years of railroading. Mr. Hufnell was formerly assistant superintendent of labor relations and personnel at Philadelphia.

Charles R. Spence, superintendent, Allegheny Division, Atoona, Pa., transferred to the Chicago Division, succeeding **William T. Ewing,** resigned. *(Continued)*



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Reading

J. J. Foster
Reading

Robert T. Pollock
CTS

John A. Carey
MBTA

Harold Collins
Dresser

William H. Peters
Magor

Ronald L. Short, terminal superintendent, Conway Yard, Pa., named superintendent–transportation, Central Region, Pittsburgh, succeeding the late **Charles W. Bolyard,** who died Sept. 26. **Gerald F. Bressler,** trainmaster, Conway, succeeds Mr. Short and is replaced by **Victor L. Terziu,** terminal trainmaster, Conway.

READING.—E. C. Lawson, manager—design and construction, Philadelphia, named chief engineer. **L. D. Freeman,** manager—track and structures, appointed chief maintenance of way officer. **J. J. Foster,** manager, signals, electrical and communications, named chief signals, electrical and communications officer. The former positions of Messrs. Lawson, Freeman and Foster were discontinued.

REA EXPRESS.—George Blanda named a national accounts executive, Chicago.

SANTA FE.—John J. Powers appointed district sales manager, Chicago, succeeding **Robert T. Ryan,** transferred to Boston.

J. P. Bullard, western manager, refrigerator department, Los Angeles, named manager, refrigerator department, Chicago, succeeding **A. C. Dewhirst,** who retired Sept. 30 after 46 years' service.

H. C. Boley named valuation engineer system, Topeka, Kans., succeeding **C. J. Cosner,** who retired Aug. 31. **J. W. Kelly** becomes assistant to valuation engineer system, Chicago.

Raymond C. Burton, assistant to director of cost analysis and research, named assistant to general auditor, Chicago.

R. L. Banion appointed acting superintendent, Middle division, Newton, Kans. **E. O. Chaddock** named acting assistant superintendent, Middle division, Oklahoma City, Okla.

SOUTHERN PACIFIC.—C. A. Ball appointed assistant vice president–labor relations, San Francisco. **L. W. Sloan** named manager of labor relations and **L. M. Fox,** first assistant manager of labor relations, both at San Francisco, **H. A. Teal, R. L. Mayhew, L. D. Bush, J. D. Lawson, P. G. Vaughn, W. E. Catlin, K. A. Wood, W. T. Jensen, J. R. Michener,** and **P. K. Larson** named assistant managers of labor relations, all with headquarters at San Francisco.

UNION PACIFIC.—Donald E. Clark named manager of industrial development, Land Division, Los Angeles.

Cyril H. Roberts, general car foreman, Los Angeles, named assistant mechanical superintendent, car department, system.

Arthur H. Clark, general freight agent, appointed assistant traffic manager, with headquarters as before at San Francisco.

Walter G. Lorys appointed general traffic agent, Washington, D.C.

YOUNGSTOWN & NORTHERN.—Robert E. Jones, superintendent, Youngstown, Ohio, promoted to general superintendent, succeeding **Grey E. Pratt,** named general superintendent **Newburgh & South Shore.**

TRANSIT

Robert T. Pollock has been named general manager and chief executive officer, **Cleveland Transit System,** succeeding **E. C. Krueger,** resigned. Mr. Pollock returns to CTS after a three-year absence. He resigned as CTS manager of operations in 1966 to take over the presidency of the W. C. Gilman Co.

John A. Carey, project manager, Haymarket-North rapid transit extension, appointed director of engineering, **Massachusetts Bay Transportation Authority,** Boston, Mass., succeeding **James A. O'Neil,** who retired Nov. 1, after 27 years with the Authority and its predecessors.

SUPPLY TRADE

Harold Collins has been appointed executive vice president, **Transportation Equipment Division, Dresser Industries, Inc.,** at Chicago. Mr. Collins was formerly vice president–marketing, Crane, Hoist & Tower Division, at Muskegon, Mich.

William H. Peters has been appointed sales manager-Western Region, **Magor Railcar Division, Fruehauf Corp.,** with headquarters in Chicago.

Lloyd Anderson, manager-product sales, **Transicold Corp.,** has been promoted to manager-rail sales, with headquarters in the Chicago Factory Branch.

Transport Leasing division of **Pullman Incorporated** has extended its services to include the sale of **Pullman-Standard** division built cars to industrial customers.

Richard A. Bernard has been appointed assistant director, industrial relations, **American Steel Foundries,** succeeding **B. A. Hindmarch,** retired.

Albert L. Furman has been named works manager, **St. Louis Car Division, General Steel Industries, Inc.,** St. Louis. Mr. Furman was formerly assistant to the vice president of manufacturing, **Emerson Electric Co.**

Gregory G. Gagarin has been appointed to vice president, International Division, **Miner Enterprises Inc.,** Washington, D.C.

Curtis S. LaMarr has been appointed manager of the newly opened Cincinnati district sales office, **L. B. Foster Co.** He will be assisted by **James O. Bushyeager,** sales representative.

Bass Dyer has been named executive vice president, Luminator Division, **Gulton Industries,** Plano, Tex.

John M. Schreiner has been appointed director of marketing of the newly formed Industrial Products Group, **Malaker Corp.,** High Bridge, N.J.

Algird C. Pocius has been appointed director public relations, **CF&I Steel Corp.,** Denver, Colo. He was formerly director publicity.

Richard H. Finn has been appointed vice president Europe, **Integrated Container Service, Inc.**

John J. Ready has been named account representative, **Transport Leasing Division, Pullman Incorporated.** Mr. Ready was formerly an industrial representative in the marketing department of the **Pullman-Standard Division.**

Richard E. Kent, assistant secretary and attorney, **Evans Products Co.,** has been appointed general counsel.

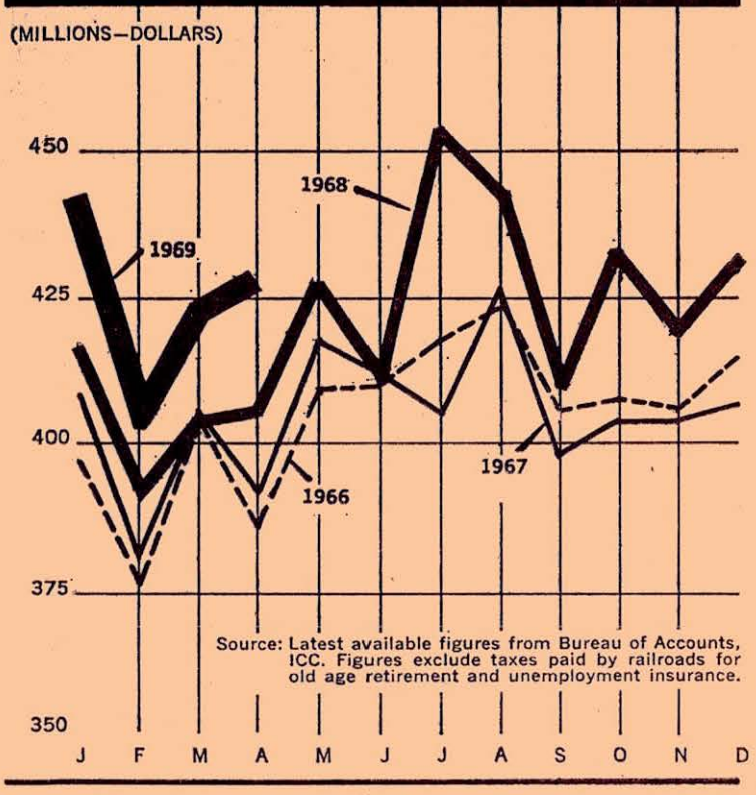
Fred W. Schmidt, district sales manager, **The Rails Co.,** Chicago, appointed chief engineer, Maplewood, N.J., and has been succeeded by **William C. Sneed.**

Victor J. Lehman has been appointed industrial relations manager, **Barco Division, Aeroquip Corp.,** Jackson, Mich.

OBITUARY

Robert J. Marony, 88, who retired in 1950 as financial vice president, **Milwaukee,** died Oct. 9 at his apartment in the Berkshire Hotel, New York.

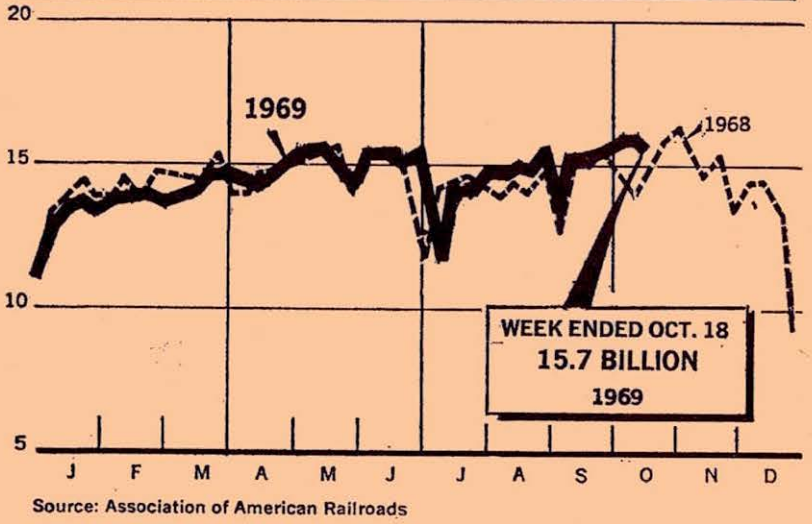
WAGE STATISTICS
CLASS I LINE-HAUL RAILROADS



Source: Latest available figures from Bureau of Accounts, ICC. Figures exclude taxes paid by railroads for old age retirement and unemployment insurance.

RAIL FREIGHT TRAFFIC TRENDS

BILLION TON-MILES (Estimated)



Source: Association of American Railroads

ORDERS AND DELIVERIES

● Orders were placed in September for 4,504 new freight cars, compared with 2,679 in August and 4,323 in September 1968. In addition, 611 rebuilds were ordered in September, compared with none in August and none in September 1968. Backlogs of new cars on order and undelivered on Oct. 1 was 45,133, compared with 47,915 on Sept. 1 and 16,124 on Oct. 1, 1968.

FREIGHT TRAIN CARS DELIVERED AND ORDERED IN SEPTEMBER AND BACKLOG OF ORDERS ON OCT. 1, 1969

DELIVERED

	September 1969	August 1969	September 1968
Built New by Car Builders	4,879	4,032	3,062
Built New in R. R. Shops	2,002	1,450	1,386
Built New—Total	6,881	5,482	4,448
Rebuilt	597	198	920
TOTAL DELIVERED	7,478	5,680	5,368

ORDERED

To be built by Car Builders	4,021	2,284	4,223
To be built New in R.R. Shops	483	395	100
To be built New—Total	4,504	2,679	4,323
To be rebuilt	611	0	0
TOTAL ORDERED	5,115	2,679	4,323

ON ORDER AND UNDELIVERED

	October 1, 1969	September 1, 1969	October 1, 1968
To be built new by Car Builders	38,853	39,816	12,588
To be built new in R.R. Shops	6,280	8,099	3,536
To be built new—Total	45,133	47,915	16,124
To be Rebuilt	4,405	4,391	5,320
TOTAL ON ORDER	49,538	52,306	21,444

Current Statistics

Net Income, Class I roads	
Six months, 1969	$265,000,000
Six months, 1968	278,000,000
New freight cars on order	
Oct. 1, 1969	45,133
Oct. 1, 1968	16,124
New freight cars delivered	
9 mos., 1969	50,060
9 mos., 1968	43,066
Serviceable cars	
Sept. 1, 1969	1,362,823
Sept. 1, 1968	1,388,680

MARKET OUTLOOK

CARLOADINGS

Loading of revenue freight in the week ended Oct. 25 totaled 601,207 cars, the Association of American Railroads announced on Oct. 30. This was an increase of 16,851 cars, or 2.09%, compared with the previous week; an increase of 3,773 cars, or 0.6%, compared with the corresponding week last year; and an increase of 8,712 cars, or 1.5%, compared with the equivalent 1967 week. Ton-miles generated by carloadings in the week ended Oct. 25 are estimated at 16.3 billion, an increase of 2.4% above the corresponding week of 1968, and 6.9% above the 1967 week.

REVENUE FREIGHT CARLOADINGS

Commodity	Oct. 18 week	Preceding week	Per cent change
Grain	25,641	26,024	— 1.5
Farm products	25,236	25,665	— 1.7
Metallic ores	49,183	54,703	—10.1
Coal	105,734	108,686	— 2.7
Crushed stone, gravel & sand	32,406	33,600	— 3.6
Nonmetallic minerals	10,653	10,775	— 1.1
Grain mill products	21,514	21,495	+ 0.1
Food & kindred products	25,632	25,996	— 1.4
Primary forest products	24,808	23,883	+ 3.9
Lumber & wood products (except furniture)	15,582	14,841	+ 5.0
Pulp, paper & allied products	25,311	24,688	+ 2.5
Chemicals & allied products	27,343	28,429	— 3.8
Petroleum products	11,217	11,104	+ 1.0
Stone, clay & glass products	21,849	22,728	— 3.9
Coke	8,914	8,828	+ 1.0
Metals & products	27,922	27,685	+ 0.9
Motor vehicles & equipment	26,381	26,116	+ 1.0
Waste & scrap materials	15,868	15,962	— 0.6
Forwarder & shipper assn. traffic	8,583	8,748	— 1.9
All other carloads	72,804	72,889	— 0.1
LCL traffic	1,775	1,720	+ 3.2
Total cars loaded	584,356	594,565	— 1.7

CUMULATIVE TOTAL, 42 WEEKS	1969	1968	1967
	22,818,738	22,838,246	22,735,794

PIGGYBACK CARLOADINGS

U. S. piggyback loadings for the week ended Oct. 18 totaled 27,911 cars, carrying 46,890 trailers, compared with 27,763 cars, carrying 45,748 trailers, in the corresponding 1968 week. Loadings for 1969 up to Oct. 18 totaled 1,087,950 cars, carrying 1,789,850 trailers, compared with 1,081,054 cars, carrying 1,760,491 trailers, in the corresponding period of 1968.

IN CANADA

Cumulative	Revenue Cars Loaded	Total cars Rec'd from Connections
Oct. 7, 1969	2,759,422	935,377
Oct. 7, 1968	2,867,209	943,930

FREIGHT-TRAIN CARS

● *ACF-GSI.*—ACF Industries and General Steel Industries will jointly produce at least 119 Vert-a-Pac cars, designed for vertical loading and enclosed shipment of automobiles, according to an announcement by GSI. The purchaser was not identified. The Vert-a-Pac car grew out of a concept developed by General Motors and Southern Pacific (RA, June 23, p. 35).

CAPITAL EXPENDITURES

● *Southern.*—Has budgeted $70 million as the initial phase of its capital improvement program for 1970. Included are 26 new diesels and 3,200 new freight cars. Southern also plans to continue maintenance expenditures at a high level.

TRANSIT

● *BART.*—Standard Steel Division of Baldwin-Lima-Hamilton, a subsidiary of Armour and Co., has received a contract to supply wheel and axle assemblies for cars to be built for the Bay Area Rapid Transit District by the Rohr Corp. The contract covers 2,000 steel-tired aluminum center wheels plus assembly of bearings and gearing for 10 prototype cars and 20 production cars. Standard will forge and roll the 30-in. steel tires and shrink fit them to aluminum centers supplied by Kaiser Aluminum & Chemical Corp. Standard will also form and install a retaining ring which will lock the tire to the center. The complete wheel represents an approximate 33% weight saving over conventional steel wheels of comparable size. Standard will ship complete wheel units to LFM-Atchison Division of Rockwell Manufacturing Co., the contractor for truck assemblies, under subcontract to the Transportation Division of Westinghouse Electric Corp. Westinghouse is the propulsion contractor for Rohr.

● *New York City.*—Will receive $99 million in direct State aid for the construction of a Second Avenue subway (RA, 7/7, p. 15). This represents two-thirds of the total $151 million needed for the two-track line. The money actually covers only a portion of the line, from 125th St. to 34th St. The route below 34th St. is still under discussion.

FOREIGN

● *Pakistan Western Railway.*—Ordered 65 high-speed diesel-electric locomotives from General Electric. Included are 42 2,150-hp U2OC and 23 1,650-hp U15C units. They will be used in mail, passenger and freight service. Delivery is scheduled for next year. Each unit is being equipped with a filtration system that will enable it to perform economically and reliably through Pakistan's severe dust storms.

YOU OUGHT TO KNOW

Federal aid held necessary for high-speed trains

If high speed rail service similar to that now being provided by Penn Central's Metroliners is to be initiated in other intercity corridors, the Federal Government is going to have to pay most of the start up bill. This is the opinion of James W. Diffenderfer, PC's assistant vice president, special services. He recently told the American Society of Civil Engineers, "there is little prospect for new high-speed rail services without substantial grants for upgrading or building the facilities." Money is also needed for research, development, and new equipment. Noting that PC has already spent $64 million on the Metroliner program, against a government outlay of less than $4 million, Diffenderfer said the line must have a bigger return than regulatory agencies investment. Admitting that prospects of immediate Federal aid are dim, he said, "we have difficulty getting DOT to think in terms of a few millions, to say nothing of the billions involved in moon shots, supersonic transports, or spent annually for air, water and highway transport."

DOT pushes simplication of foreign moves

Joint rates, single through-bills of lading, and interchange or pooling of equipment and facilities would be allowed carriers engaged in the international movement of freight, according to a bill introduced in Congress recently by the Transportation Department. Called the Trade Simplification Act, the measure "is necessary if modern container technology is to provide through systems of international, intermodal transportation," said John A. Volpe, DOT Secretary. Only legal barriers stand in the way of the "known" needs of shippers and the "known" desires of carriers to join forces for such service, Volpe said.

PC hails new appliance hauling concept

Penn Central's new concept for hauling major household appliances is meeting with great success, says James R. Sullivan, vice president-marketing. The concept couples a new distribution program with a computer-designed 60-ft, high-cube box car. PC invested some $6.3 million in 270 of the special cars, which feature 10-ft-wide side doors, cushioned underframes, solid couplers and pneumatic load-securing devices. Though centered on a major customer, Frigidaire, the concept resulted from a PC marketing study on behalf of the entire appliance industry. Since Frigidaire shipped its first carload, more than 2,000 loads have arrived virtually damage free, according to Sullivan.

Los Angeles site for meeting of ASME RR Division

Southern Pacific President B. F. Biaggini will be a speaker at the annual meeting of the Railroad Division of the American Society of Mechanical Engineers, scheduled for Nov. 18 and 19 in Los Angeles. Three technical sessions, keyed to the theme "Challenges of the Seventies," will cover problems of contemporary car design and increasing demands on braking systems. John A. Volpe, Secretary of Transportation, will deliver ASME's annual Roy V. Wright lecture, a memorial to the late managing editor of Railway Age.

Transportation coordination for New Orleans

New Orleans Union Passenger Terminal is one of the nation's newest and finest—a real monument to rail passenger service, and only 15 years old. But, like most rail passenger stations today, it could hardly be described as "busy"—and so there will be plenty of room for the terminal's new tenant, Greyhound Lines-East. Six tracks are being closed and new bus-loading bays are being installed in what a Greyhound officer calls "a great step forward for the concept of intermodal transportation." James L. Kerrigan, Lines-East president, says the move is "part of a national drive by Greyhound to make it easier for travelers to use our services. We have similar ties with other transit modes in Chicago, Cleveland and Boston."

TRANSIT ROUNDUP

AIRPORT EXTENSIONS PROPOSED FOR BART: Two studies of possible airport extensions for San Francisco's Bay Area Rapid Transit are being proposed. The first involves a link with San Francisco International Airport, with cost estimates varying between $90 and $140 million. The study team, consisting of architectural firms and engineering consultants, proposes extending BART service eight miles to the airport from the contemplated terminus at Knowles Ave. in Daly City. The study estimates that 25,000 people would use the new facility daily, including 13% of airport employees and 28% of all air passengers and airport users.

The other study, to provide a link to Oakland International Airport, has been set in motion by six agencies in the Oakland-San Francisco area. It has already authorized the filing of a DOT application for $60,000 to finance two-thirds of the first phase of an engineering study, and each of the agencies has agreed to contribute an additional $30,000. The first phase includes determination of a link from the airport to a BART station only 3½ miles away. The task force is headed by B. R. Stokes, BART General Manager, as Chairman. R. L. Ceder, BART Transportation Analyst, is Secretary and Project Coordinator.

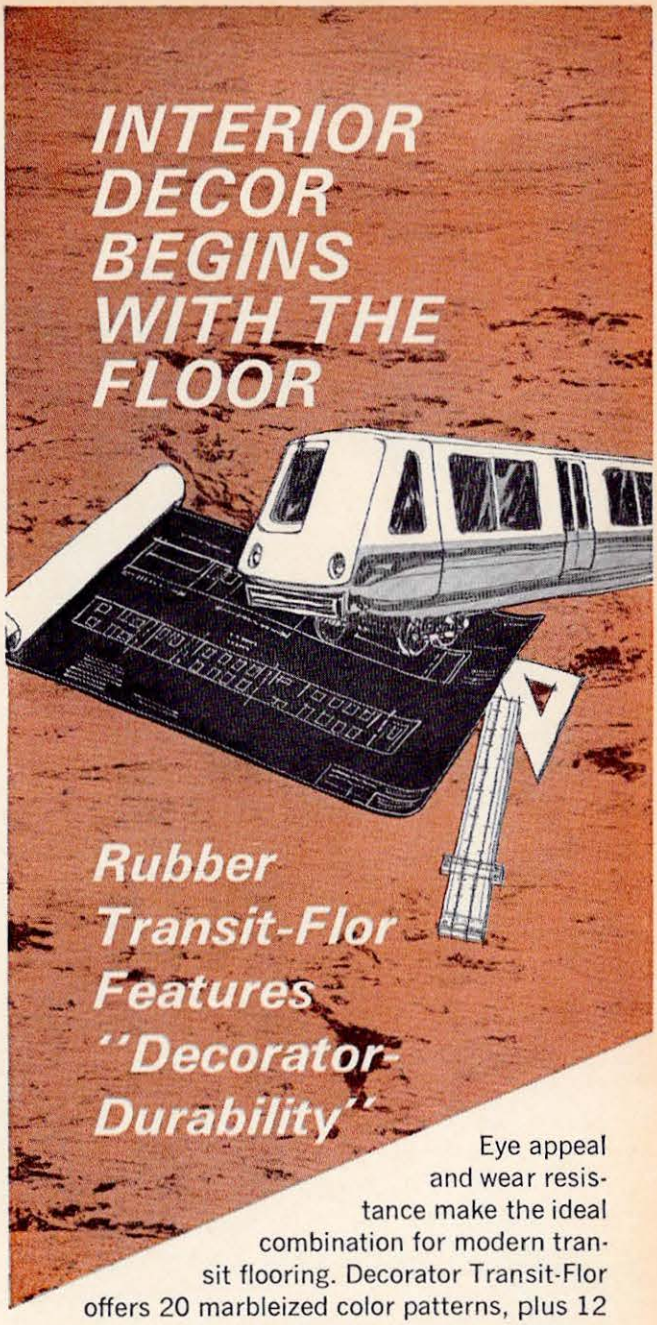
DAN RYAN ABOVE EXPECTATIONS: The Chicago Transit Authority's new Dan Ryan rapid transit line had 45% more riders per weekday at the end of the first week of operation than CTA had estimated. More than 70,000 riders per day patronized the line—75% of a total of 95,000 riders predicted after a full year's operation. Normal patronage during the first week was estimated at 28,500, about 30% of the 95,000 figure.

SINGLE AGENCY FOR CHICAGO? Alan S. Boyd, president of the Illinois Central, has proposed the creation of a single major agency to coordinate the efforts of the numerous transportation planning groups now at work in the Chicago area. "For all the progress that is being made through the interaction of these groups . . . no one agency has authority for over-all coordination," Boyd told the Chicago Rotary Club. "What the situation calls for is the systems approach to the solution of our transportation needs."

THE PHILADELPHIA STORY: Philadelphia's Operation Northeast, a reduced-fare commuter train service with interconnecting suburban bus routes, now handles more commuters in a single day than it formerly handled in two weeks a decade ago, according to a recently released report. Ridership has increased nearly 1300%, from under 10,000 per month to over 130,000 per month.

The report also shows that the acceptance of rail service has increased over the entire area covered by the Southeastern Pennsylvania Transportation Authority. Ridership in the last decade increased from 22 million annually to 33 million. Origin-destination studies show that nearly three out of four center-city commuters use the train in preference to the automobile. The report goes on to point out that volume increases alone along the Penn Central and Reading lines amount to a peak hour movement greater than the entire capacity of a six-lane, two-directional expressway.

—**Philip Harrison**



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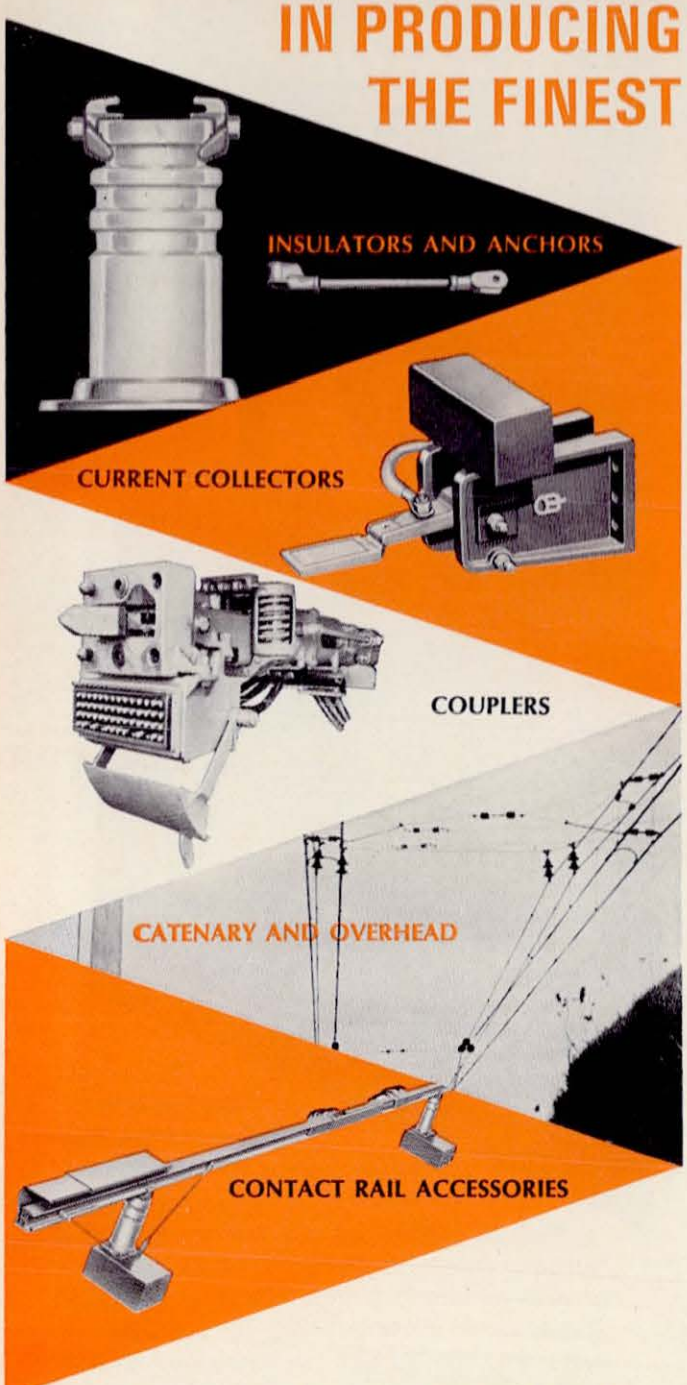

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WHILE THEY LAST . . .

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VIEWPOINT

What is the "railroad problem"?

If memory serves, it was Richard III—courtesy of Will Shakespeare—who said it: "Now is the winter of our discontent. . ."

It doesn't take memory to put the same words into the mouths of railroad men today—this year, this month, this day.

Seldom has there been such a winter of discontent—of dissatisfaction, of disappointment, of dejection.

Three-fourths of the way through 1969, some railroads—not many, but some—are doing great. Some roads are doing poorly, and this depressed group seems to get more depressed with each passing financial report. Some roads are losers from the word "go" and they keep losing and losing and losing.

In the meantime, there is the Interstate Commerce Commission. In the meantime, there are the brotherhoods. In the meantime, there is that segment of railroad management that seems, sometimes, not to know what time it's living in.

Take first the ICC. If figures mean anything, railroads have a powerful case for another rate increase. Perhaps the Commission could not just let proposed increases go into effect without any challenge whatsoever. But if the ICC dallies and delays the requested increases long after now-scheduled hearings, then two things will become evident: (1) *More* railroads will start going broke; and (2) the ICC will demonstrate that its knowledge of economics is not all that great.

Take next the labor organizations. If you read the demands, you have to believe that labor's organizations think railroads are golden-egg-laying geese. Somebody (not Shakespeare) once did a piece about the murder of the gifted goose.

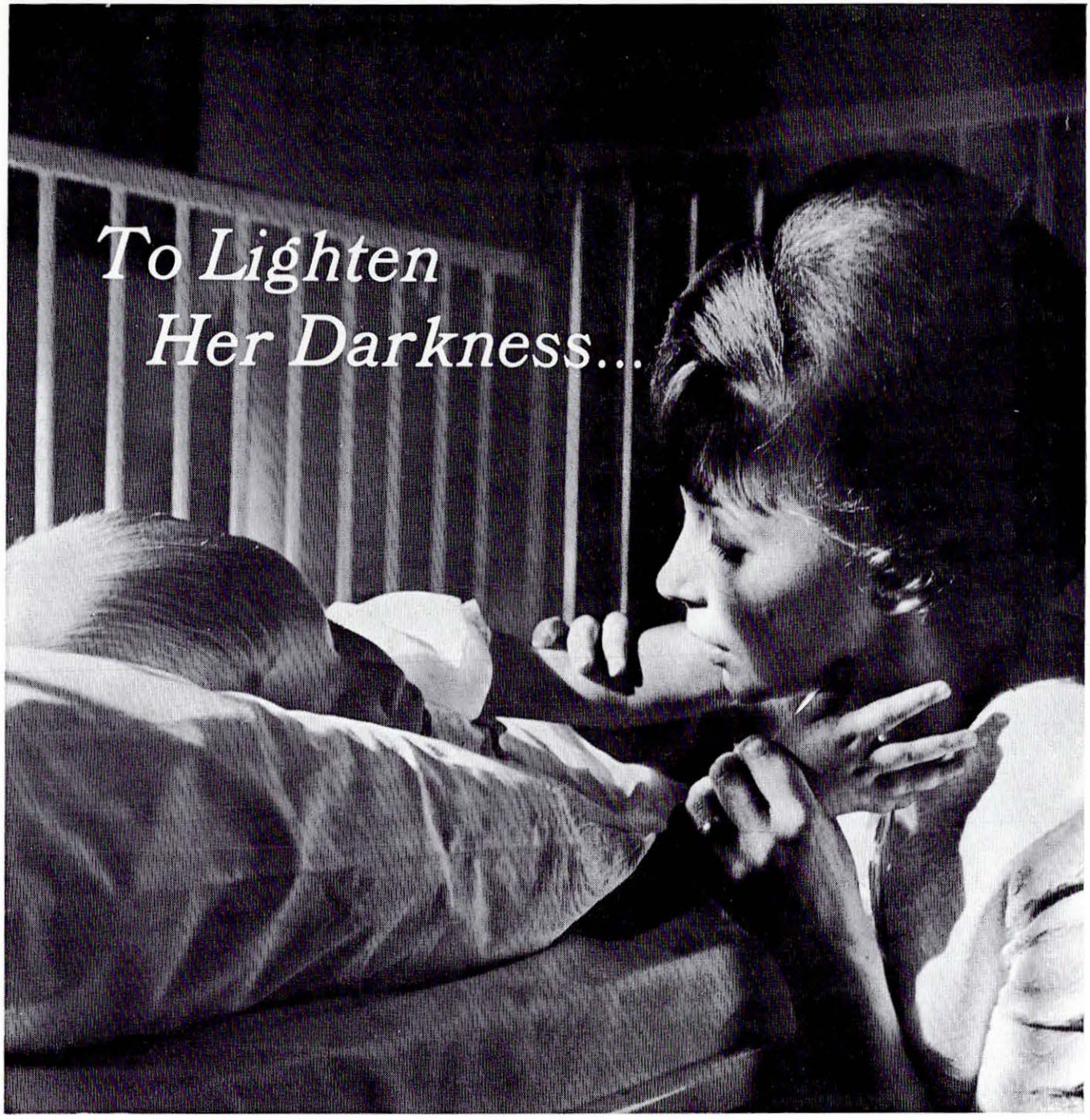
ARE RAILROADS AN INDUSTRY?

Take finally management. Put an electronic bug in an AAR board meeting, or talk with the people who try to make today's railroads click. If you think the railroad industry is an *industry*—a truly interrelated, inter-connected, inter-dependent industry—sometimes you suffer a 50-point loss and you go back to "start."

The railroad "problem" is not a regulatory problem nor a labor problem nor a management problem. The railroad "problem" is not something that any one of these groups—or even any two—will solve, can solve. The railroad "problem" is complex, many-faceted, hard in many respects even to define.

But back up for just a minute. Look at the earnings record of the airline industry. Look at the relationships between revenues and expenses in trucking. Look at who's getting rich in the barge business. Who? Look at transportation. Look at the earnings record of many of transportation's suppliers. What *did* Boeing do in the third quarter of 1969, for instance, and what's its nine-month performance?

You come, sometime, to a certain conclusion: Transportation generally is getting the short end, in this affluent society. Ah, you say, but railroads are getting the shortest end. Maybe so. But *really*, the shortest end—the really shortest end—is going to the fellow who buys transportation. He could have it so much better—if, if, if. . .



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